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INTERNATIONAL INSTITUTE OF AGRICULTURE

BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC AND SOCIAL INTELLIGENCE)

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THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

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The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

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The Institute, always confining its attention to the international aspect of the various questions concerned, shall:

(*a*) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets;

(*b*) communicate the above information as soon as possible to those interested;

(*c*) indicate the wages paid for farm work;

(*d*) record new diseases of plants which may appear in any part of the world, showhing the regions infected, the progress of the diseases, and, if possible, any effective remedies;

(*e*) study questions concerning agricultural co-operation, insurance, and credit from every point of view; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit;

(*f*) submit for the approval of the various governments, if necessary measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10*d.*	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	1*s.* $1^{1}/_{5}$*d.*	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	9 $^{33}/_{64}$*d.*	at par
1 Dollar, gold ($) (100 cents) (United States)	=	4*s.* $^{5}/_{16}$*d.*	at par
1 Drachm, gold (100 lepta) (Greece)	=	9 $^{33}/_{64}$*d*	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1*s.* 7 $^{33}/_{64}$*d.*	at par
1 Franc (100 centimes) (France)	=	9 $^{33}/_{64}$*d.*	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 $^{33}/_{64}$*d.*	at par
1 Leu (100 statiniki) (Bulgaria)	=	9 $^{33}/_{64}$*d.*	at par
1 Lira (100 centesimi, (Italy)	=	9 $^{33}/_{64}$*d*	at par
1 Litre	=	0.21998	gallons
		0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 $^{3}/_{4}$*d.*	at par
1 Mark (100 penni) (Finland)	=	9 $^{33}/_{64}$*d.*	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	2*s.* 2 $^{61}/_{64}$*d.*	at par
1 Milreis, gold (Portugal)	=	4*s.* 5 $^{19}/_{64}$*d.*	at par
1 Peseta, gold (100 centimos) (Spain)	=	9 $^{33}/_{64}$*d.*	at par
1 Peso, gold (100 centavos) (Argentina)	=	3*s.* 11 $^{37}/_{64}$*d.*	at par
1 Pound, Turkish, gold (100 piastres) (Ottoman Empire)	=	18*s.* 0 $^{13}/_{64}$*d.*	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	2*s.* 1 $^{3}/_{8}$*d.*	at par
1 Rupee, silver (16 annas) (British India)	=	1*s.* 6*d.*	at par
1 Talari (20 piastres) (Egypt)	=	4*s.* 1 $^{11}/_{32}$*d.*	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	2*s.* 0 $^{37}/_{64}$*d.*	at par
1 Zentner (Germany)	=	110.23171	lbs.

YEAR X — NUMBER 1-2 ROME, JANUARY-FEBRUARY, 1919

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Part I: Co-operation and Association

GREAT BRITAIN AND IRELAND.

STATISTICS FOR 1916 OF AGRICULTURAL CO-OPERATION IN THE UNITED KINGDOM.

SOURCE (OFFICIAL):

REPORTS OF THE CHIEF REGISTRAR OF FRIENDLY SOCIETIES FOR THE YEAR ENDING 31ST DECEMBER 1916 PART B: INDUSTRIAL AND PROVIDENT SOCIETIES. London, 1916.

INTRODUCTION.

The most complete statistics of agricultural co-operative societies in the United Kingdom are those contained in the Annual Reports of the Chief Registrar of Friendly Societies, the second part of which relates to societies registered under the Industrial and Provident Societies Act. The societies registered under this Act are legally obliged to furnish to the Registrar detailed annual returns of their business and though there is necessarily considerable delay in obtaining the returns the statistics, when they are published, are very nearly complete. It should be noted, however, that not all classes of agricultural co-operative societies are registered as « industrial and provident societies », the majority of the co-operative credit and live-stock insurance societies being registered under the Friendly Societies Act.

The Report divides co-operative societies into groups, the most important being the distributive trading societies, the sales of which amounted in 1916 to a total of £124, 400,000.

Many of the distributive societies have productive departments, as also have their great federations, the Co-operative Wholesale Societies, and there are purely productive societies as well. The total value of the productions of these three classes of society taken together was £46,000,000 in 1916.

The third great group of societies is that which more particularly interests us — the agricultural societies "Under this heading," says the Report for 1916, "we have co-operation viewed from another standpoint. The movement as applied to agriculture is, in the main, an organisation of producers; the members (farmers, smallholders, etc.) having combined to secure the advantages of co-operation in the disposal of their produce." It will be seen, however, that they combine also for many other purposes besides this.

§ 1. Societies added to and removed from the register.

The following table shows the number of each class of agricultural co-operative society registered in 1916, the number removed from the register, and the net increase during the year:

TABLE I. — *Societies added to and removed from the Register in* 1916

	Added to Register	Removed from Register	Net increase (+) or Decrease (—)
Agricultural Trading Societies	88	21	+ 67
Beekeepers' Societies	—	1	— 1
Dairy Societies	16	6	+ 10
Egg and Poultry Societies	13	6	+ 7
Flax Societies	—	1	— 1
Farmers' and Growers' Associations	3	—	+ 3
Pig and Cattle Societies	—	50	— 50
Threshing Societies	1	—	+ 1
Small Holdings and Allotments Societies	15	13	+ 2
Small Holders' Clubs	—	10	— 10
Miscellaneous Agricultural Businesses	2	—	+ 2
Agricultural Development Societies	1	1	—
Total	139	109	+ 30

Of the societies placed in the register, 68 were affiliated to the Agricultural Organization Society; 27 to the Scottish Small Holders' Organisation; 5 to the Scottish Agricultural Organisation Society, and 39 to the Irish Agricultural Organisation Society.

The 50 Pig and Cattle Societies struck off the register were societies promoted by the Wexford Meat Supply and Bacon Factory, Ltd., to act as subsidiary organisations for educational purposes and to furnish to the factory information as to the supply of pigs available in the districts covered. They appeared to transact no direct business and it was felt that no useful purpose was served by keeping them on the register. The registrations were, therefore, cancelled.

The Report contains some interesting observations on the reasons why certain societies decided to bring their operations to a close.

During the period covered by the Report, it did not appear that societies formed for the purpose of acquiring small holdings had met with that measure of success which had been thought possible. In response to letters of enquiry on the subject, at least two smallholders' societies stated that their operations were brought to an end owing to lack of interest on the part of members. In another case the secretary stated that "the allotment holders in the village and district appear to prefer to rent direct from the landlord." "I am afraid I must plainly say that many of our little co-operative societies have to struggle against the ill-will of farmers, tradespeople, and middlemen of all kinds," represents the opinion of a rector who has had much experience in the organization and working of Small Holdings Societies. That some Small Holdings Societies have difficulty in acquiring land is manifest from the following extract from a letter received giving an indication of the steps taken with this object:

"(1) All the owners of land in the district were circularised as to their willingness to let or sell land to the society. Negative or no replies were received.

"(2) Advertisements were made to the same effect in the local papers with a similar result.

"(3) Application was made under the Act of 1907 to the Local Authorities, and. eventually some 21 acres were acquired, but the Local Authority asked a rental which, having regard to the condition of the property, the society was unable to pay.

"(4) The Commissioner for Small Holdings was repeatedly approached. He at one time recommended the society to apply to the Local Authority to make an order for a certain piece of land, but the applications in this respect, although backed by the Commissioner and the A.O.S., were ignored."

A Federation of Growers came to grief during the year. It was stated that shortage of capital had prejudicially affected the Federation, in that:

"(1) Produce for sale could not be obtained regularly and in sufficient quantities from the growers.

"(2) It was never possible to do business with the best-class retailers as such traders will not trade at a stall which has only occasionally what

they require. As a consequence it was necessary to trade with men who took long and irregular credit, and who were not always sound financially."

§ 2. Progress since 1913.

The three years previous to and including 1916 show a remarkable expansion and prosperity in agricultural co-operation, war conditions having probably contributed to the success. This expansion is shown by the following comparison between the figures for 1913 and for 1916 of the agricultural trading societies, dairy societies, agricultural wholesale societies, and egg and poultry societies, the four groups by which the bulk of co-operative agricultural business is transacted:

Table II. — *Figures showing progress from* 1913 *to* 1916 *of the four principal groups of agricultural societies.*

	Agricultural Trading Societies		Dairy Societies		Agricultural Wholesale Societies		Egg and Poultry Societies		Total	
	1913	1916	1913	1916	1913	1916	1913	1916	1913	1916
Number of Returns Received	376	518	336	384	2	4	84	105	798	1,011
	£	£	£	£	£	£	£	£	£	£
Total Sales . . .	1,700,000	3,872,000	3,226,000	5,878,000	249,000	804,000	221,000	455,000	5,396,000	11,009,000
Sales of Produce	184,000	362,000	2,948,000	5,357,000	—	299,000	189,000	389,000	3,321,000	6,407,000
Surplus on Year's Working . . .	10,000	75,000	25,000	84,000	1,000	9,000	3,000	9,000	39,000	177,000
Liability on Shares and Loans	179,000	302,000	394,000	423,000	35,000	71,000	19,000	20,000	627,000	816,000

The Report notes that the continued rise in prices during the period covered no doubt is responsible for an appreciable part of the increase in the figures relative to turnover.

This would probably be specially true in the case of the sales of dairy and other produce, but the sales of the agricultural trading societies have doubtless also been affected by the immense increase in the area of land under cultivation and the consequent increased demand for agricultural requisites of all kinds.

We shall now give, in greater detail, comparative figures for the different classes of agricultural co-operative society.

§ 3. Societies carrying on agricultural industries and trades.

The following table gives aggregate figures for 1916 of the different classes of societies carrying on agricultural industries and trades, together with total figures for the whole group for the four previous years:

TABLE III. — *Societies carrying on Agricultural Industries and Trades: Statistics for 1916 with total figures for four previous years.*

	Statistics for 1916								Totals for previous years			
	Agricultural Trading Societies	Beekeepers' Societies	Dairy Societies	Egg and Poultry Societies	Farmers' and Growers' Associations	Pig and Cattle Suppliers	Smallholders' Clubs	Total 1916	Total 1915	Total 1914	Total 1913	Total 1912
Number of societies making returns	518	3	384	105	12	—	23	1,045	983	883	849	834
Number of Members	60,796	104	53,726	10,976	537	—	1,370	127,709	115,784	101,860	99,258	98,121
	£	£	£	£	£	£	£	£	£	£	£	£
Sales	3,871,964	—	5,877,699	454,726	11,613	—	23,468	10,239,470	7,809,767	5,698,985	5,172,640	4,845,022
Salaries and Wages	67,321	1	117,634	13,592	4,895	—	1,065	204,508	169,921	150,964	138,795	125,869
Other Trade Expenses	62,212	1	336,392	12,692	3,910	—	1,497	416,704	332,180	259,150	278,021	237,451
Surplus on Year's Working	74,953	1	84,116	8,792	356	—	(— 134)	168,284	153,394	90,280	(1) 1,481	35,877
Allocation of profit —												
Interest on Shares	3,193	—	5,500	401	—	—	23	9,117	8,096	6,711	6,024	6,729
Dividends on Purchases	12,026	—	3,539	1,749	225	—	16	17,555	14,891	13,205	12,045	10,804
Bonus to Employees	2,158	—	1,943	213	—	—	—	4,314	3,712	1,609	1,886	1,565
Liabilities —												
To Shareholders	107,154	19	207,738	12,016	7,510	—	1,896	336,333	305,145	274,208	260,857	247,103
To Creditors for Loans	195,313	—	214,963	7,499	5,504	—	1,820	425,099	404,107	354,713	341,403	289,067
Other liabilities	421,766	—	309,219	18,095	1,697	—	2,624	753,401	533,858	384,229	325,072	298,499
Net Balance of Profit and Reserve (or Loss)	160,560	(—9)	305,937	21,400	14,607	—	(— 546)	501,949	403,006	287,420	214,344	202,619
Assets —												
Value of stock-in-trade	235,368	—	94,722	10,216	13,013	—	781	354,100	252,296	154,623	137,987	122,662
Buildings, Fixtures and Land used in Trade	54,685	—	463,755	8,136	11,422	—	834	538,832	530,458	484,972	443,651	408,079
Investments and other Assets	394,740	10	479,380	40,658	4,883	—	4,179	1,123,850	863,362	660,975	560,038	506,547
Value of Productions —												
Milk and Dairy Produce	40,326	—	5,245,019	748	332	—	969	5,287,394	4,229,073	3,221,157	2,928,428	(2)
Eggs and Poultry	70,443	—	68,384	377,670	100	—	7,320	524,117	324,350	224,302	212,092	(2)
Live Stock	206,243	—	14,065	68	2,925	—	120	223,421	158,500	158,629	128,210	(2)
Fruit and Market Garden Produce	26,508	—	98	246	2,929	—	2,279	32,060	37,292	35,291	30,113	(2)
Sundries	18,096	—	29,535	10,061	2,137	—	511	60,340	87,789	68,049	27,964	(2)
Total Value of Productions	361,616	—	5,357,301	388,793	8,423	—	11,199	6,127,332	4,837,004	3,707,428	3,326,807	2,476,722

(1) A large balance of loss was incurred by one society during 1913. — (2) Particulars not available.

Of the 1,045 societies carrying on agricultural industries and trades which furnished returns for 1916, 280 were in England, 91 in Wales, 135 in Scotland and 539 in Ireland.

Agricultural Trading Societies. — These societies are formed to secure to their members (farmers, etc), the advantages of co-operation in the supply of implements, seeds, manures, and other general agricultural requisites. They also market members' produce : this side of their business was still comparatively small in 1916, but was increasing rapidly. The main item was live-stock, produce exceeding £200,000 in value being disposed of under this heading on behalf of members.

The following table gives the principal figures for 1916 of a few of the larger societies :

TABLE IV. — *Agricultural Trading Societies : Statistics of Large Societies.*

Abbreviated Name of Society	Number of Members	Sales	Surplus on Year's Working	Liabilities to Share-holders	Reserve Funds	Net Balance of Profit Awaiting Allocation
		£	£	£	£	£
Eastern Counties Farmers	1,273	488,424	5,785	3,558	9,274	14,715
Southern Counties . . .	438	359,647	2,354	2,199	1,645	4,479
Yorkshire Farmers . . .	83	297,863	3,884	4,545	1,957	3,734
Preston Farmers	650	216,694	7,303	15,021	1,300	8,202
Carmarthen Farmers . .	1,566	150,502	6,142	1,273	—	17,039
West Midland Farmers	690	103,108	5,491	889	1,310	6,420

All of these societies are in England, with the exception of the Carmarthen Farmers, which is in Wales. The smallness of the share capital of this latter society is noticeable, being less than £1 per member ; the society consists almost entirely of small farmers.

Dairy Societies. — The majority of the dairy societies are registered in Ireland. For the greater part they represent combinations of dairy farmers for the purpose of maintaining joint butter-making factories ("creameries"). In conjunction with the creameries are established depôts ("auxiliaries") for the collection of milk. At the depôts the cream is separated and the skimmed milk returned, the cream being forwarded to the factories to be worked up into butter. To a small extent produce of other kinds is disposed of on behalf of members and, in addition, business to the amount of about £500,000 was transacted in agricultural requirements on the lines of the agricultural trading societies.

While the figure for sales was in excess of that of 1915 by some 1 ¼ millions of pounds, there was but little increase in the surplus. The following extract from the President's Report to the members of one of the large dairy societies has a bearing on this point :

"It will be observed that the marked increase in turnover, the high price received for butter and paid for milk are brought about largely on account of the war conditions prevailing during the year under review. A superficial observer might, from a casual consideration of these figures, make the comment that the past year's trading reveals exceptional prosperity for the industry. A little thought will, however, moderate the view, as it will be seen on going more closely into the accounts that our productive expenses have increased by over 50 per cent., as compared with previous years. Again the cost (under existing conditions) of producing the milk or 'raw material' before it reaches the society has also considerably increased, so that on the whole the high prices ruling at present, not alone for milk and butter, but for agricultural produce generally, are, so far as the average farmer is concerned, to a very large extent counter-balanced by increased costs of production."

The Report gives statistics of some of the larger dairy societies. Amongst these appears the Irish Co-operative Agency Society, which, however, is not a dairy society of the ordinary kind, but a federation of dairy societies for the joint marketing of their produce. The number of members was 33, and the smallness of this number gives a hint of its character; the sales amounted to £219,180; the surplus on the year's working to £762; the liability to shareholders, £629, and the net profit awaiting allocation to £1,661.

We give the figures for the remaining dairy societies having a turnover above £50,000.

TABLE V. — *Dairy Societies: Statistics of Large Societies.*

Abbreviated Name of Society	Number of Members	Sales	Surplus on Years' Working	Liabilities to Share-holders	Reserve Funds	Net Balance of Profit Awaiting Allocation
		£	£	£	£	£
Wiltshire Farmers	620	234,037	5,591	7,839	—	5,029
Killeshandra	1,295	99,562	3,113	5,109	6,447	3,113
Clynderwen Farmers	788	78,989	1,888	570	—	6,334
Sturminster Newton Farm	111	77,827	2,776	2,696	—	2,283
Piltown	453	77,411	1,235	2,145	—	1,235
Lombardstown Dairy	92	75,617	1,417	475	—	11,906
Rathkenny	102	69,651	249	567	529	1,393
Kantoher	174	57,236	1,061	842	—	4,506
Omagh	345	56,675	202	1,232	—	199
Clones	401	55,977	410	1,421	2,000	2,075
Tipperary Creamery	93	54,392	325	270	—	1,101

Of these the Wiltshire Farmers and the Sturminster Newton Farm are in England ; the Clynderwen Farmers is in Wales, and the remainder are in Ireland.

Egg and Poultry Societies. — These societies establish depôts for the collection and marketing of the eggs and poultry produced by their members. As in the dairy societies, the members find it advantageous to purchase their farming requisities through the societies. Considerable increases in membership, turn-over and profits took place in 1916. The Report of the largest society of the group, the Framlingham and Eastern Counties Co-operative Egg and Poultry Society, Ltd., showed that 8,500,000 eggs and some 2,000 turkeys were dealt with during 1916.

The following are the figures for some of the larger egg and poultry societies :

TABLE VI. — *Egg and Poultry Societies : Statistics of Large Societies.*

Abbreviated Name of Society	Number of Members	Sales	Surplus on Year's Working	Liabilities to Shareholders	Reserve Funds	Net Balance of Profit Awaiting Allocation
		£	£	£	£	£
Framlingham and Eastern Counties	1,089	75,072	1,988	1,645	1,640	2,901
Golden Vale Dairy	62	57,731	697	2,567	—	552
Cloughmills Poultry	186	28,164	232	117	—	2,082
Scottish Poultry Produce . . .	107	25,077	38	31	—	154
Dervock Poultry.	702	22,815	505	535	—	1,734
Dunboe Poultry.	389	21,040	652	129	500	2,500

The Framlingham society and the Golden Vale Dairy are in England ; the Scottish Poultry Produce Society (as its name implies) is in Scotland ; the three remaining societies are in the North of Ireland.

Farmers' and Growers' Associations. — One farming society was registered in 1916 but did not commence business. The two other farming societies again did well. The Coln St. Andrews Farming Society returned a surplus on the year's working of £1,105, as against £986 for the previous year, and the Co-partnership Farms showed a surplus amounting to £804. The latter society is worked on a profit-sharing basis. The co-partners' earnings varied from £96 to £125, in addition to which it is understood each lived rent free and received an allowance of bacon and milk.

The growers' and planters' societies for the most part adopt model rules prepared by the Agricultural Organisation Society. These rules provide that the objects of the society to which they relate shall include the

conduct of experiments in the cultivation and preparation for market of the produce of the particular industry concerned and the dissemination of information and advice, by literature and other means, in regard thereto. The societies make provision in their rules for obtaining advances from the Development Fund.

The accounts of the Anglesey Bulb Growers' Society disclosed a balance of loss, but not so large as in the two years preceding.

The Lancashire and Cheshire Tobacco Planters' Society has suspended its operations until after the war. The Society was formed by a few private individuals in the tobacco trade for the purpose of experimenting in growing tobacco in England. A loss of over £1,100 was incurred in connection with the experiments conducted. The society seemingly hoped to make further experiments when times were more propitious.

The British Tobacco Growers' Society does not itself engage in production; it supervises the operations of approved growers and pays them certain minimum prices for their produce. The produce dealt with during 1916 was small; but the year's working shows a large balance of loss. The Society's operations, however, are experimental in character.

The British Sugar Beet Growers' Association did not appear to have commenced growing operations up to the end of its 1916 financial year. It is understood, however, that a loan to the Association of £125,000 has now been recommended by the Development Commissioners. The purpose of the loan is to purchase an estate in Nottinghamshire with a view to conducting a sugar beet experiment on an extensive scale.

The Chicory Planters' Association was obliged to go into liquidation, the result of its operations during the one season of its existence (1916-17) being unsatisfactory from a financial standpoint. The Society did not itself undertake the cultivation of chicory, but purchased green root from farmers to the extent of 91 tons. This yielded 13 tons of dried root. Purchases amounted to £291 and productive and other charges to £783, whereas sales only realised £475, leaving a net loss on working of £599. The season's results appear to have fallen short of anticipations in many respects. For example, the costs of production averaged £3 14*s.* per ton of green root as against an estimate of £1 12*s.* per ton, and the green root yielded one-seventh of its weight in dried root, whereas a yield of one-fourth had been anticipated. Two kilns were erected at a cost of £777; one was inspected by an expert and pronounced to have been built on incorrect lines. No provision in respect of the loss which will arise on the sale of these kilns is included in the £599 loss previously mentioned.

Smallholders' Clubs. — This is a group of societies affiliated to the Smallholders' Union and carrying on business much on the lines of agricultural trading societies. The sales again increased in 1916 but there was an aggregate balance of loss.

§ 4. Agricultural wholesale societies

There were four societies in 1916 classed as agricultural wholesale societies, the largest of these being the Irish Agricultural Wholesale Society. During the year the functions of the Agricultural Co-operative Federation where taken over by the Farmers' Central Trading Board, thus leaving only one wholesale society in England for the supply of agricultural requirements. The 1916 sales of the Farmers' Central Trading Board were returned at £133,000, a turnover more than double that of the previous year.

A society was registered during the year to carry on the business of wholesale providers of agricultural produce for supplying the requirements of the army, but it has since been absorbed by the Army Canteen Committee.

The following table shows the statistics for 1916 of the three agricultural wholesale societies in England and of the Irish Agricultural Wholesale Society, with comparative aggregate figures for the four previous years.

TABLE VII. — *Agricultural Wholesale Societies: Statistics for 1916 with total figures for four previous years.*

	Agricultural Wholesale Societies in England (Three Societies)	Irish Agricultural Wholesale Society	Total 1916	Totals for Previous Years			
				Total 1915 (4 societies)	Total 1914 (2 societies)	Total 1913 (2 societies)	Total 1912 (2 societies)
Number of Members .	242	381	623	556	332	316	296
	£	£	£	£	£	£	£
Sales	324,589	479,877	804,466	568,752	289,338	248,705	202,480
Salaries and Wages . .	2,943	6,854	9,797	7,357	4,964	4,261	3,443
Other Trade Expenses	4,405	9,003	13,408	9,113	5,653	6,214	4,060
Surplus on Year's Working	3,998	4,989	8,987	6,259	2,024	926	1,018
Allocation of Profit:							
Interest on Shares .	79	800	879	674	530	457	427
Dividends on Purchases.	—	—	—	—	—		
Bonus to Employes.	28	—	28	—	—	—	
Liabilities:							
To Shareholders . .	1,630	16,619	18,249	13,769	11,104	9,488	8,873
To Creditors for Loans	3,114	49,699	52,813	32,491	26,555	25,999	33,026
Other Liabilities . .	34,396	38,711	73,107	47,632	18,014	13,118	13,687
Net Balance of Profit and Reserve	12,522	12,890	25,412	17,686	5,568	4,438	5,161
Assets:							
Value of Stock in Trade	3,430	31,222	34,652	17,313	9,898	10,800	8,719
Buildings, Fixtures and Land used in Trade	4,498	6,036	10,534	8,504	5,679	5,774	5,997
Investments and other Assets . . .	43,734	80,661	124,395	85,761	45,664	36,469	46,031
Value of Productions:							
Milk and Dairy Produce	179,278	33,634	212,912	165,064	37,757	(1)	(1)
Eggs and Poultry. .	65	73,267	73,332	67,620	48,142	(1)	(1)
Sundries.	—	12,314	12,314	14,245	10,161	(1)	(1)
Total Value of Productions	179,343	119,215	298,558	246,929	96,060	(1)	(1)

(1) Particulars not available.

Of the total number of members in 1916, 129 were societies and the remainder individual members.

§ 5. Societies carrying on businesses connected with agriculture.

Table VIII contains for societies classed as "carrying on businesses connected with agriculture" similar statistics to those which we have given for other groups.

TABLE VIII. — *Societies carrying on Businesses connected with Agriculture: Statistics for* 1916 *with total figures for four previous years.*

	Flax Societies	Horse and Cattle Breeding Societies	Threshing Societies	Agricultural Development Societies	Miscellaneous Agricultural Businesses	Total 1916	Totals for previous years			
							Total 1915	Total 1914	Total 1913	Total 1912
Number of Societies making Returns	8	14	151	19	17	73	63	53	55	50
Number of Members	635	1,021	417	3,967	5,300	11,340	9,753	8,096	7,672	7,084
	£	£	£	£	£	£	£	£	£	£
Income from Business	5,517	4,153	2,512	5,206	22,313	39,701	33,115	29,255	32,668	28,966
Salaries and Wages	2,210	278	813	7,074	6,299	16,674	13,774	10,947	10,898	9,934
Other Management Expenses	1,158	1,249	1,318	10,497	6,859	21,081	17,104	13,401	13,512	12,293
Surplus on Year's Working	943	559	356	(—2,928)	6,925	5,855	2,613	2,733	330	4,147
Interest on Shares	—	1,030	27	—	957	2,014	390	934	1,017	570
Liabilities:										
To Shareholders	1,598	2,798	1,557	10,919	23 362	40,234	34,120	32,369	32,469	34,504
To Creditors for Loans	2,351	290	4,347	16,213	15,542	38,743	43,127	39,699	26,490	28,795
Other Liabilities	308	173	702	1,003	92,616	94,802	23,404	29,202	10,389	26,158
Net Balance of Profit and Reserve (or Loss)	1,557	1,024	1,767	(—3,001)	14,425	15,772	14,248	11,976	10,117	4,312
Assets:										
Buildings, Fixtures and Land Used in Trade	5,085	—	5,920	19,135	14,814	44,954	39,638	32,211	30,181	34,829
Investments	15	4	1	1,206	17,094	18,320	15,961	13,607	12,416	14,201
Other Assets	714	4,281	2,452	4,793	114,037	126,277	59,300	67,428	36,868	54,739

Flax Societies. — With one exception all the flax societies are situated in Ulster. Their business is, in the main, the scutching of the flax grown by the members and a large part of their income is accordingly derived from the fees paid by members for this work. Considerable progress has been made by several of the societies in the group.

Horse and Cattle Breeding Societies. — Only two of these societies seem to have prospered during the year 1916. The Insch Horse Breeding Society (Aberdeenshire, Scotland) received £1,422 in service fees and had a surplus

of £754 on the year's working. The West Sussex Live Stock Society received service fees to the amount of £599 and had a surplus of £42.

Threshing Societies. — Of these societies all except one are in Ireland. The position of the societies showed a further improvement in 1916. The two largest societies are the Lucan Agricultural Machinery Society, which received £603 in threshing fees and had a surplus of £131, and the Ballyduff Farmers' Society, which received £267 in fees and had a surplus of £97.

Agricultural Development Societies. — These are, for the most part, societies for promoting agricultural co-operation or encouraging agricultural industries. As they are not trading bodies, their success or failure is not to be judged by the figures showing profit or loss. Nor in the case of societies dependent in the main upon subscriptions or government grants, does the bulk of the income figure in the statistics.

In 1916 the Irish Agricultural Organisation Society received a grant from the Development Fund of £5,320, and the Scottish Agricultural Organisation Society a grant of £1,000. The Agricultural Organisation Society, which carries on the promotion of agricultural co-operation in England and Wales, received a grant of £6,861 from the Development Commissioners, but this society has, since 1912, been registered under the Companies Acts and does not now figure in the statistics of co-operative societies.

Miscellaneous Businesses — The largest society in this group is the Agricultural and General Co-operative Insurance Society. In addition to its insurance business, the Society undertakes the duties of executors and trustees. Seemingly in consequence of a large drop in the claims matured, the 1916 surplus was greatly in excess of that for the previous year.

The most important of the remaining societies are auction marts for the sale of agricultural produce. The Pershore Fruit Market returned sales amounting to £46,000, while live-stock, etc., to the total value of £250,000 was dealt with by three other marts.

The Landowners' Co-operative Forestry Society showed a surplus of £1,393 in 1916. The objects of this society are to report on, to value and to sell forestry products. The sales in 1916 were £183,000, as compared with £68,000 in the previous year.

§ 6. Credit Societies.

Co-operative agricultural credit societies are, as we have said, for the most part registered under the Friendly Societies Act. Only six such societies figure in the 1916 returns as registered under the Industrial and Provident Societies Act. These six societies contained 127 members. During the year loans to the amount of £718 were repaid; £2 was received on deposit account; £143 was received as interest and premiums on loans; £376 was paid in salaries and wages, and other management expenses amounted to £244; the surplus on the year's working was £642.

and £52 was allotted as interest on shares. The liabilities to shareholders amounted to £775 ; the amount of deposits in hand was £525 ; the liabilities to creditors for loans were £3,739 and other liabilities £1,624. The net balance of profit and reserve was £645. The amount of loans outstanding was £2,265 and other assets (including fixtures, etc., and investments) amounted to £5,043.

In order to complete the information relating to agricultural credit societies, the following particulars are given regarding societies registered under the Friendly Societies Act:—

During 1916 there were 327 agricultural credit banks on the register; 279 in Ireland, 45 in England, and 3 in Wales. Of these 166 Irish, 41 English and 3 Welsh societies made returns.

The Irish societies returned 17,808 members, received in deposits £11,012, and made loans to 6,132 members amounting to £49,178, or an average of about £8 per borrower. The amount owing by the societies at the end of the year in respect of loans was £16,557 and in respect of deposits £44,360, while a balance of £53,130 was due from members for advances made.

The membership of the 44 societies in England and Wales which made returns only totalled 862. Advances were made to 71 members during the year, the average sum advanced being £11 10s. The balance owing by borrowers was £1,947.

§ 7. Small holdings and allotments societies.

An important group of societies is the small holdings and allotments societies. These were formed, for the most part, with the object of renting land from county councils under the provisions of the Small Holdings and Allotments Act, 1908, which applies only to England and Wales. Several of the societies have, however, rented land from private landowners and some have purchased land outright.

The following table gives statistics of this group of societies:

TABLE IX — *Statistics of Small Holdings and Allotments Societies for 1916 and four previous years.*

		1916	1915	1914	1913	1912
Number of Societies making returns		180	180	182	195	197
Number of Members		19,118	17,750	16,927	15,960	14,780
		£	£	£	£	£
Sales		8,789	10,104	6,155	4,230	4,027
Rent paid by societies for land		30,249	28,958	26,204	21,737	17,271
Rent received from tenants		35,170	33,629	30,286	28,402	23,272
Trading departments, surplus on year's working		318	623	290	222	(— 38)
Liabilities: To shareholders		12.883	12,168	11,699	14,034	12,465
To creditors for loans		25,010	25,264	26,155	25,878	20,591
Other liabilities		12,992	13,767	12,666	9,848	5,416
Net balance of profit and reserve on trading departments (or loss)		698	175	(—539)	(—1,767)	679
Net balance on small holdings department		6,046	4,945	3,506	4,414	(1)
Assets: Value of stock in trade		1,438	1,093	1,057	996	639
Building, fixtures and land		34,299	34,774	34,025	30,673	16,894
Investments and other assets		21,892	20,452	18,405	20,738	21,618
		Acres	Acres	Acres	Acres	Acres
Acreage of Land: Small Holdings		13,258	13,158	12,726	12,225	10,372
Grazing rights		669	727	692	650	259
Allotments		1,780	1,682	1,651	1,532	1,662
Number of Tenants: Small Holdings		1,430	1,459	1,459	1,547	1,256
Allotments		12,627	10,798	10,151	9,587	8,387
Size of holdings: 1–5 acres	Number	783	836	818	965	736
	Acres	1,903	2,069	1,996	2,242	1,856
5–10 acres	Number	293	276	269	278	247
	Acres	2,074	1,976	1,964	1,916	1,753
10–30 acres	Number	249	245	235	226	199
	Acres	4,294	4,290	4,106	2,761	3,384
30–50 acres	Number	69	67	76	84	58
	Acres	2,780	2,650	2,881	2,244	2,066
Over 50 acres	Number	33	29	22	13	16
	Acres	2,163	2,053	1,564	949	1,042

(1) Particulars not available.

Of the 19,118 members, it appeared that about three-quarters had acquired land; 1,430 members occupying small holdings covering an area of 13,258 acres and 12,627 being in occupation of 1,780 acres of allotments. The small holdings averaged 9 ¼ acres per holder, while the average size of an allotment was about one-seventh of an acre.

In addition to acquiring land many societies assist their members by supplying them with implements and finding a market for their produce; the sales amounted to £8,789.

One small holdings society, it is interesting to note, acquired mineral rights in respect of a part of the land previously held as a small holding.

The following table gives particulars in regard to some of the larger small holdings and allotments societies:—

TABLE X. — *Small Holdings and Allotments Societies: Statistics of Large Societies.*

Abbreviated Name of Society	Number of Members	Rent paid by Societies for Land	Rent received from Tenants	Liabilities to Shareholders	Net Balance on Small Holdings Department	Area of Land			Number of Tenants	
						Small Holdings	Grazing Rights	Allotments	Small Holdings	Allotments
		£	£	£	£	Acres	Acres	Acres		
Lincolnshire and Norfolk	20	4,357	4,995	1,923	1,681	2,219	34	13	221	36
North Berkshire .	41	1,379	1,513	618	—	1,059	48	5	32	28
Mere	29	686	921	112	579	453	259	—	29	—
Priors Marston. .	37	741	762	22	30	380	6	46	12	35
Street	76	828	935	106	252	410	—	7	36	8
Marshfield	16	447	463	58	12	367	2	—	12	—
Sutton.	116	538	650	49	36	164	183	5	33	5
Kingsthorpe . . .	20	555	652	103	251	335	—	—	11	—

§ 8. GENERAL SUMMARY.

In conclusion we give a summary table showing the total figures for 1916 for each class of agricultural societies, with the aggregate figures for the group.

TABLE XI — *Agricultural Societies: Summary of Statistics for* 1916.

	Agricultural Industries and Trades	Agricultural Wholesale Societies	Agricultural Businesses	Agricultural Credit Societies	Small Holdings and Allotments Societies	Total
Number of Societies making returns	1,045	4	73	6	180	1,308
Number of Members	127,709	623	11,340	127	19,118	158,917
	£	£	£	£	£	£
Sales or Income from Business	10,239,470	804,466	39,701	145	43,959	11,127,741
Total Salaries and Wages	204,508	9,797	16,674	376	1,979	233,334
Productive Work:						
Value of Productions	6,127,332	298,558	—	—	—	6,425,890
Salaries and Wages	122,696	3,329	—	—	—	126,025
Other expenses	416,704	13,408	21,081	244	2,479	453,916
Surplus on Year's Working	168,284	8,987	5,855	642	318	184,086
Allocation of Profit:						
Interest on Shares	9,117	879	2,014	52	159	12,221
Dividends on Purchase, etc.	17,555	—	2,010	—	44	19,609
Bonus to Employees	4,314	28	78	—	—	4,420
Liabilities:						
To shareholders	336,333	18,249	40,234	775	12,883	408,474
To depositors	—	25,548	—	525	9	26,082
To creditors for loans	425,099	27,265	38,743	3,739	25,001	519,847
Other liabilities	753,401	73,107	94 802	1,624	12,992	935,926
Net balance of profit and reserve (or loss)	501,949	25,412	15,772	645	6,744	550,522
Assets:						
Value of Stock in trade	354,100	34,652	—	—	1,438	390,190
Buildings, fixtures and land used in trade	538,832	10,534	44,954	2	34,299	628,621
Investments and other assets	1,123,850	124,395	144,597	7,306	21,892	1,422,040

We have seen (Table II) that for the four principal groups of agricultural societies the sales have more than doubled since 1913, and the sales of those four groups differ so little from the total sales that the statement would be true also of the total sales.

Of the surplus of £184,086 in 1916, only £36,250 was appropriated

as interest, dividend, etc. Part of the balance of £147,764 is accounted for by appropriations to "special depreciation," but the bulk of the amount appears to have remained undistributed. There seemed to be an intention of allowing profits to accumulate, thus adding financial strength to the movement. In relation to the sales the percentage of surplus is low, but it is the usual practice of agricultural societies to give their members an immediate benefit by enabling them to sell their produce at a higher price or to purchase their requirements at a lower price, instead of giving them a deferred benefit in the form of a dividend out of an accumulated surplus.

ITALY.

THE NATIONAL INSTITUTE OF CREDIT FOR CO-OPERATION AND THE INSTITUTE OF CREDIT FOR CO-OPERATIVE SOCIETIES IN 1917.

SOURCES:

ISTITUTO NAZIONALE DI CREDITO PER LA COOPERAZIONE. ASSEMBLEA GENERALE ORDINARIA DEI PARTECIPANTI TENUTA IN ROMA IL 27 MARZO 1918. ANNO QUARTO (*National Institute of Credit for Co-operation. Ordinary General Meeting of Members held in Rome on 27 March* 1918. *Fourth year*). Rome, Casa Editrice Italiana, 1918.

ISTITUTO DI CREDITO PER LE COOPERATIVE. RELAZIONI E BILANCIO APPROVATI DALL'ASSEMBLEA DEGLI AZIONISTI DELL'8 APRILE 1918. XIII ESERCIZIO (*Institute of Credit for Co-operative Societies. Reports and Balance-Sheet approved by the Meeting of Shareholders on* 8 *April* 1918. 13*th year*) Milan, Tipografia degli Operai, 1918.

Co-operative societies in Italy obtain the credit necessary to their business from various sources — popular banks, savings-banks, ordinary institutions of credit, federations of co-operative societies having banking functions, etc., and also from two institutions which they have themselves created for this purpose, namely the National Institute of Credit for Co-operation (*Istituto Nazionale di Credito per la Cooperazione*) and the Institute of Credit for Co-operative Societies (*Istituto di Credito per le Cooperative*). Of these two institutions the former arose in Rome in 1913 as a result of the free and joint action of the greater Italian institutes of credit and thrift, and the other was founded in Milan in 1904 on the initiative of the *Società Umanitaria*. The reports of the work accomplished by these two institutions in 1917 allow an idea to be formed of their aims and importace.

§ 1. THE NATIONAL INSTITUTE OF CREDIT FOR CO-OPERATION.

This institution was formed by the royal decree of 15 August 1913, No. 1140, as a moral entity subject to government supervision and control. Its object is, as the reader already knows (1), to promote and assist the Italian co-operative movement in its various forms. In the few years of its existence it has extended its sphere of action to all the most important centres of Italy, founding branches and offices of inspection in the chief towns. It does the following kinds of business: *a*) it discounts for co-

(1) For the origin and organization of this institution, see the article in our issue for December 1913.

operative societies and their consortia bills signed by two suitable and solvent persons, cheques and bills secured by pledges; *b*) it gives direct aid to co-operative societies, on the security of the bills they accept; *c*) it makes advances in return for the cession of bills of work, accepted invoices, the mandates of public administrations and the credit held with these; *d*) it grants loans on pledged securities; *e*) it collects and makes payments on behalf of co-operative societies, accepts deposits, opens current accounts, etc.

Further in virtue of a lieutenancy decree of 4 October 1917, No. 1604, superseded by the decree of 14 July 1918, No. 1142 (1), the power of affording agricultural credit to the agricultural universities of Latium is granted to the National Institute, in view of the necessity of giving an impulse to the production of grain by the utilization of land previously intended only for pasturage. In order to discharge this trust, which is that of supplying the bodies mentioned with the means necessary to the ordinary management of their lands, the National Institute founded an *ad hoc* office, responsible for giving technical and administrative help to cultivators in the Roman Campagna. Business of this kind done in the latter part of 1917 extended to fourteen agricultural universities consisting of 3211 persons who cultivated 6627 hectares of land.

The report on the year mentioned deals with the work of the Institute in relation to various kinds of societies, but concerns especially co-operation of production and labour, that characteristic form of Italian co-operation. It shows how co-operative businesses, contracting for public works with the State or local bodies, found themselves at the outbreak of war engaged on such work by force of their contracts, and suffered by the increased difficulty of finding labour and the higher cost of material. The most important question for societies of this kind was that of a revision of the stipulated prices which no longer corresponded with existing costs. Those associations, on the other hand, which could, with the help given by the Institute, give themselves up to war industry, had a large development. They took over about 43 million liras' worth of work. The report distinguishes among them as follows: 1) co-operative metallurgical and mechanical societies which executed works worth more than 15 million liras; 2) co-operative societies for the making of clothing, which are divided into small units and achieve modest financial results, and which have arisen here and there especially with the aim of withdrawing women from exploitation by speculators; they have supplied about 9 million liras' worth of work; 3) co-operative societies for supplying labour, responsible for more than 9 million liras paid in wages; 4) co-operative societies supplying wood and other articles to various public administrations, which have supplied more than 6 million liras' worth of goods; 5) co-operative societies for loading and unloading merchandise in the ports.

To resume: the report states that co-operation of an industrial character is well fitted to the needs of the day; but it considers that the tendency which is appearing among some members, who " do not well understand

(1) See our issue for October 1918, page 825.

co-operative aims and their own ulterior interests" and who aspire to a distribution of the profits obtained, should not be approved, for these profits ought to constitute the basic capital indispensable to the further growth of these associations.

In relation to agricultural co-operation, the Institute intensified its action during 1917, helping especially collective farms, which represent an original form of Italian co-operation (1); and thus while the societies of this kind which had already been financed in 1916 almost all of them extended the area they cultivated, new co-operative societies were constituted for the purpose of tillage. Altogether 22,224 members cultivated 10,241 hectares of land. Credit to societies of this kind was encouraged by the lieutenancy decrees of 1916 and 1917 which we have duly noticed. And since the National Institute of Credit for Co-operation was specifically included among the bodies authorized to afford agricultural credit, it had assigned to it by the Ministry of Agriculture, in the form of an advance at the rate of 3 per cent., two of the sums of 20,000,000 liras set apart for this purpose by the lieutenancy decree of 28 June 1917, No. 1035. No transaction of this kind was undertaken by the Institute without the intervention of the special office of agricultural inspection and consultation at Bologna, which was founded last year and is helped by an *ad hoc* commercial agency charged to make collective purchases of primary material, implements and machinery and collective sales of produce.

In the second half of 1917 the Institute devoted an equal effort to helping and co-ordinating agricultural co-operation in the provinces of Ravenna, Bologna, Modena, Parma, Milan, Cremona and Pavia, forming federal provincial groups and thus giving the societies efficacious discipline; and it also endeavoured to bring about an intense agricultural movement in the provinces of Forli, Ferrara, Mantua, Piacenza and Novara, in Liguria, in Tuscany and in Apulia. To this activity that in favour of the agricultural universities of Latium, to which we have already alluded, should be added.

Consumers' co-operation was also an object in 1917 of the activity of the Institute: the credit granted to it reached the important sum of 13,000,000 liras, in which are comprised some transactions facilitating the provisioning of autonomous bodies of consumers in the towns of Venice, Bologna, Mantua, Livorno and Avellino. In this branch of activity also very satisfactory results were obtained.

We pass to an examination of the principal figures relating to business in 1917, beginning with the movement of securities. Bills discounted numbered 15,924 and were for 89,084,564 liras, as against 15,477,601 liras in 1914, 42,802,768 liras in 1915, and 65,885,256 liras in 1916.

Business was done directly with 445 clients, representing 2225 co-operative societies, distributed as follows: 1423 consumers' societies; 627 production and labour societies; 60 agricultural societies; 115 various societies

The average amount of bills was 5594 liras, as against 3946 liras in 1916.

1) See in this connection the papers in our issues for May and August 1918

The movement of exchange regards in round figures, 63,500,000 liras representing orders of public administrations; about 6,000,000 liras for commercial transactions; more than 13,000,000 liras for direct loans (almost all for credit granted to consumers); 3,750,000 liras for transactions secured by agricultural liens; and 2,500,000 liras for cessions by intermediate institutions.

Three hundred and four new contracts for undertaking the orders of public administrations were made, and aid was granded to 290 co-operative societies for the total sum of 19,080,969 liras: the contracts represented altogether 63,491,935 liras' worth of work, including 20,619,210 liras for public works. The advances secured by these orders of public administrations to co-operative societies constitute one of the most important and typical transactions. We therefore think it opportune to reproduce the following table, which contains data with reference to them, distributed by districts:

	Number of contracts	Number of co-operative societies	Value of orders — Liras	Aid granted — Liras
Piedmont	2	2	150,000.00	50,000
Lombardy	26	19	10,623,075.90	2,425.000
Venetia	72	80	13,382,233.78	2,740,000
Liguria	29	23	10,842,000.00	3,528,000
Emilia	61	58	13,870,618.30	4,902,000
Tuscany	26	30	999,270.00	701,000
Marche	3	14	67,653.00	51,000
Umbria	2	2	1,080,000.00	400,000
Latium	48	40	8,570,829.93	2,820,000
Campania	26	11	3,150,458.76	1,251,000
Apulia	6	8	640,859.78	200,969
Basilicata	3	3	141,035.60	3,000
	304	290	63,491,935.05	19,080,969

The works undertaken by single co-operative societies and consortia of co-operative societies and financed by the Institute in the four years of its life cover a sum of more than 127,000,000 liras.

Of the securities for 89,000,000 liras to which we have already referred 56,000,000 liras represent business in North Italy; 27,750,000 liras business in Central Italy;; and 5,250,000 liras business in South Italy. This last item was in 1917 more than double what it was in 1916.

The larger body of business made it necessary to enlarge rediscounting operations: during the year bills for 85,000,000 liras were ceded, always with the approval of the issuing institutions and the more important of the bodies which took part in the business.

Securities held on 31 December 1917 amounted to 31,506,075 liras Liabilities on the sum of the bills then in being amounted only to 7138 liras

The net profits of the year, as shown by the excess of profits over losses, was 341,262 liras, and therefore noticeably superior to their amount in 1916 which was 296,728 liras.

In order to enable the Institute to meet the perpetually growing demand for credit on the part of co-operative societies of various kinds, in particular of those agricultural and consumers' societies which are made increasingly necessary by the public's new needs, it was resolved at the extraordinary general meeting of members held in Rome on 25 October 1917 to increase the Institute's financial resources, either by paying up in advance the last two tenths of the subscribed capital, or by doubling the quotas of some of the most conspicuous members (National Thrift Fund, *Monte dei Paschi* of Siena, Savings-Banks of Turin, Florence, Genoa, Palermo, Bologna and Modena), or by admitting new members (The National Insurance Fund against the Accidents of Workmen incurred during Work and the Savings-Bank of the Bank of Naples). There is question of an increase of 6,115,000 liras of capital in all, which will be added to the previous 8,200,000 liras, making a total of 14,315,000 liras.

This is, briefly, a summary of the multiple activity deployed in 1917 by the National Institute of Credit for Co-operation which has, in addition to its chief offices in Rome, secondary offices in Florence and Genoa and affiliated branchs in Bologna, Naples, Ravenna, Venice, Verona, Bari and Milan, a close network of officies of inspection which in the north, the centre and the south of Italy watch over and assist co-operation, forwarding its development in every way (1).

§ 2. The Institute of Credit for Co-operative Societies.

This Institute, organized as a limited liability co-operative society, arose, as we have said, in 1904, by the initiative of the *Società Umanitaria* and with the help of the larger popular banks and some co-operative societies. Its central office is at Milan ; it has two branches, at Reggio Emilia and Turin, and three agencies at Musocco, Niguarda and Parma. The aim it sets before itself (Article 3 of the by-laws) is that of " aiding the development of co-operative societies of production, labour, consumption and credit, to the advantage of labourers, employees, peasants and *métayers* and of small working landowners, facilitating the working of these societies by means of credit ". With this object it undertakes the following transactions : *a*) discount for co-operative societies of bills bearing two sig-

(1) Among them should be noticed the office of Bologna, already mentioned, after which come that of Rome for the agricultural universities of Latium, that of Florence for the agricultural co-operative societies of Tuscany, and more recently that of Venice for the co-operative societies of Venetia. On the initiative of the National Institute of Credit a school for co-operators, situated at Reggio Emiia, was formed in order to train persons who would promote the development of co-operative societies, especially in the south of Italy, and direct their activity

natures, cheques, notes of pledge, accepted bills for labour, accepted invoices, and mandates of public and private administrations known to be solvent, giving a preference to discount bearin on the smallest sums; *b*) the granting to co-operative societies of loans or subsidies in return for pledged securities, and of credit in return for the cession of mandates of public or private administrations; *c*) the receipt as savings deposits of sums of no less than 10 liras, paying interest on them at the rate of 3 ¼ per cent. net; and the receipt of deposits on open current account, paying interest on them at the rate of 2 ½ per cent. net; the issue of interest bearing bonds maturing at fixed terms; the collection and making of payments on behalf of co-operative societies, etc.

The report of the administrative council on the thirteenth year of business (1917) states that during it there was an active revival of consumers' co-operation, because the least well-off portion of the population felt the need for provisions to be regularly and certainly distributed by the leaders of the co-operative movement. As regards agriculture, it should be noted that in the Reggio Emilia branch, besides the normal credit business with consumers' and labour and production co-operative societies, the business of granting aid, secured by agricultural liens, to agricultural co-operative societies has been begun and has had a satisfactory result.

On 31 December 1917 the Institute's capital in shares amounted to 1,624,500 liras, made up of 21,660 shares, of the nominal value of 75 liras each, divided among 593 shareholders. At the same time the reserve amounted to 449,125 liras.

During the year 3363 operations of credit were effected with 417 co-operative societies and others, for the total amount of 26,172,195.04 liras, distributed as follows:

1769	operations with	132	prod. and labour societies	16,081,380.54 liras
684	»	» 80	consumers' societies	3,336,837.08 »
77	»	» 11	popular banks	2,325,166.45 »
79	»	» 10	agricultural societies	1,330,609.00 »
112	»	» 20	various societies	947,194.25 »
642	»	» 164	private businesses	2,151,007.72 »

3363 operations with 417 co-op. societ. and others 26,172,195.04 liras distributed as follows:

826	operations	2,511,976.47 liras	for discount of commercial bills
636	»	7,097,968.55 »	for direct loans on security
329	»	9,187,593.29 »	for mortgage loans
994	»	5,463,973.28 »	for subsidies, advances
9	»	120,000.00 »	for cautionary deposits
569	»	1,790,683.45 »	guarantees, securities

3363 operations 26,172,195.04 liras altogether.

Among districts the business was distributed as follows:

Lombardy .	661	operations	with	46	co-operative	societies	and others	8,828,757.24 liras
Piedmont .	500	»	»	87	»	»	»	3,239,436.63 »
Liguria. . .	19	»	»	4	»	»	»	609,038.00 »
Emilia . . .	2009	»	»	258	»	»	»	7.894,103.11 »
Tuscany . .	113	»	»	11	»	»	»	4,550,658.61 »
Latium. . .	9	»	»	6	»	»	»	190,321.00 »
Other regions	52	»	»	5	»	»	»	859,850.45

3363 operations with 417 co-operative societies and others 26,172,195.04 liras

In the following table we give data as to the activity deployed by the Institute in its thirteen years of existence:

Business done by the Institute from 1 *July* 1904 *to* 31 *December* 1917.

Year	Number of operations	Amount — Liras
1904-05.	275	1,158,626.08
1905-06, ...	268	4,086,483.66
1906-07.	766	6,923,549.91
1907-08.	953	9,139,387.48
1908-09.	1,339	9,538,859.09
1909-10.	1,575	10,821,242.15
1910-11.	2,625	18,640,705.57
1911-12.	8,737	38,598,898.10
(18 months)		
1913	7,074	30,274,232.63
1914	6,272	26,476,385.32
1915	3,663	22,348,772.61
1916	3,455	24,265,927.28
1917	3,363	26,172,195.04
Total . . .	40,365	228,445,264.92

This enormous sum was distributed as follows among the districts mentioned below:

Year	Number of operations	Amount — Liras
Lombardy	10,916	77,192,919.83
Piedmont	5,395	26,405,282.09
Liguria	3,286	26,904,591.26
Emilia	12,947	51,740,798.90
Tuscany	4,565	30,193,365.58
Latium	1,214	5,185,777.59
Other regions	2,042	10,822,529.67
	40,365	228,445,264.92

Each of the various kinds of co-operative societies participated to the following extent :

	Number of transactions	Amount — Liras
Production and labour co-operative societies.	26,445	150,641,730.32
Consumers' co-operative societies	5,743	32,625,233.06
Agricultural co-operative societies	1,135	7,233,547.35
Co-operative credit banks	954	10,006,482.39
Co-operative popular »	2,093	20,386,756.25
Various co-operative societies	3,995	7,551,515.55
	40,365	228,445,264.9

As regards trust depots, the total movement of these in 1917 was 7,675,353.92 liras for incoming and 4,329,370.75 liras for outgoing deposits, leaving a balance on 31 December of 3,345,983.07 liras, made up as follows : current accounts 2,199,016.57 liras ; savings-bank books 918,952.13 liras ; interest-bearing bonds 228,014.37 liras. In thirteen years of business the balance of trust deposits held at the end of each year increased as follows :

Year	Amount — Liras	Year	Amount — Liras
1904-05	48,436.76	1910-11	2,083,997.56
1905-06	562,850.64	1911-12	3,458,522.58
1906-07	1,327,339.17	1913	3,927,793.59
1907-08	1,348,397.81	1914	3,217,456.20
1908-09	1,583,246.04	1915	2,754,464.75
1909-10	2,302,143.44	1916	3,081,219.81
		1917	3,345,983.07

The bills held on 31 December 1917 amounted to 855,080.63 liras. During this year bills rediscounted at various institutions amounted to 22,391,573.71 liras.

The Institute's own securities and paper reached a value of 456,556.84 liras. distributed as follows : securities guaranteed by the State, 233,701.86 liras ; banking and industrial securities, 222,854.98 liras.

Gross profits amounted to 310,348.75 liras ; and — 280,686.09 liras being deduced for expenses and various costs — net profits to 29,662.66 liras.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

CANADA.

AGRICULTURAL ASSOCIATION IN BRITISH COLUMBIA IN 1917 — *Province of British Columbia Twelfth Annual Report of the Department of Agriculture for the Year* 1917. Victoria (British Columbia) 1918; and *The Year Book of British Columbia*, ibid. 1911

British Columbia was for long almost entirely a cattle-ranching country. In this mountainous and sparsely settled province, which had until comparatively recent times no means of communication except cattle-trails, one or two main roads and watercourses, no other kind of farming was practicable Cattle, and to a limited extent horses and sheep, could be raised, especially where the river bottoms supplied hay for their winter fodder, and could be driven to the navigable waters of the lower Fraser whence they were shipped to the coast cities. Later they were transported along the main line of the Canadian and Pacific Railway.

Here and there enterprising ranchers grew wheat, beans and other vegetables, a little fruit and some hay for local consumption, especially when there were mining camps in their neighbourhood to afford them markets. But fruit was not grown on an important scale until after 1890 when Lord Aberdeen began his experiment of turning a cattle ranche into a large fruit farm. In ten years' time he had scored a complete success; and thereafter fruitgrowing became the chief industry of the country, and the ranches of the interior which were within reach of railways were rapidly converted into fruit farms. In 1911 the great majority of the large ranches had been sold for subdivision. Orchards had sprung up on the hills and tablelands formed from volcanic ash. On the open prairie land and the cleared timber land small mixed farms arose, cereal crops, potatoes, poultry and eggs and butter being produced.

The general change from cattle-ranching to small farming was accompanied by an organization of the provincial Department of Agriculture. The department came into being about 1890; and it gave the first impulse to agricultural association for it was responsible for the organization of the Farmers' Institutes and the Fruit Growers' Association.

The Farmers' Institutes. — These important organizations numbered about fifty in 1911, and steadily increased in number and in membership until 1916 when a total number of 146 institutes grouped 6,974 farmers. In the following year three institutes were temporarily closed on account of the war but five were founded, so that their total number at the end of 1917 was 148. The response to the call for recruits to the Imperial armies

had however been such that their membership had fallen to 6,194. The membership of individual institutes varies from some ten or a dozen to 232.

The activity of the institutes is largely educational. They hold courses of lectures on agricultural and horticultural subjects, and give demonstrations connected with poultry, dairy and stockfarming. The British Columbia University helps them in this instructional work. They also hold shows, called "fairs": in 1917 four institutes held "fairs" as against seven in 1916. Judges were sent by the Department of Agriculture. Other enterprises of the institutes in 1917 were the holding of competitions for field crops, the importation of throughbred stock, the erection of machinery and a campaign against gopher.

The institutes have a central organization in the Advisory Board of Farmers' Institutes which submits resolutions to the Department of Agriculture. This department is now considering a scheme for grouping all of them in nine districts corresponding to the electoral districts of the province, and a new advisory board will be formed for them in accordance with the 1917 amendment to the Agricultural Act, 1915.

In 1917 they received grants from the Department of Agriculture amounting to $12,633 as against $15,088 in 1916.

The Women's Institutes. — These associations are subsidiary to the Farmers' Institutes. In 1915 there were 56 of them with a total membership of 2,994, and in the next year 60 with a membership of 3,039. One new institute was organized in 1917, bringing the total number to 61, but the average membership of individual institutes fell from 51 to 45 so that the total membership was only 2,754.

Four conferences were held by the Women's Institutes in 1917. At these, resolutions regarding the interests of women and children of the agricultural class were passed and were submitted to the Department of Agriculture. A travelling lecturer visited the various institutes; and forty-one of them, as against forty-three in 1916, held flower-shows. Some successful competitions were also held. Sixteen institutes have school committees which endeavour to improve conditions in rural schools and three have formed boys' and girls' clubs. The Women's Institutes received a grant of $8,742 from the Department of Agriculture in 1917 as against one of $6,153 in 1916.

Agricultural Fair Associations. — These associations exist for the purpose of holding agricultural shows. For the first time for many years no new association was incorporated in 1917. Their total number is 67, and 45 of them held in 1917 "fairs", at which live stock, dairy produce, poultry, fruit and vegetables, honey and other products were shown and to which the Department of Agriculture sent judges. There was a fall in the number of entries for these shows because the scarcity of labour has obliged farmers to work on their land early and late.

The total grant of the Department of Agriculture to the associations was $12,850 as against $13,425 in 1916.

The British Columbia Fruitgrowers' Association. — This association, which represents the most important industry in British Columbia, directed

its energy in 1917 mainly to the efficient advertising and marketing of the fruit and vegetable crop. It was also able to secure better rates for transport from the freight and express companies. Its annual meeting is attended by representative farmers from all the fruitgrowing districts in the province.

The British Columbia Stock-breeders' Association. — This association aims at encouraging breeding from thoroughbred sires and breeding from selection. In 1917 it accomplished two very useful pieces of work: first the publication and distribution of a Breeders' Directory, and secondly the grant of a rebate of half the charges for the transportation of thoroughbred stock, either imported or moved from point to point within the province. Five delegates of the association attended the annual meeting of the Western Canada Live Stock Union in Regina.

The British Columbia Dairymen's Association. — The eleventh year of the life of this association, 1917, was a very successful one which increased its membership from 250 to 277. It is its custom to hold annual conventions, at which subjects of interest to dairy farmers are discussed, changing the place of meeting from year to year. In 1917 two very successful meetings of this kind were held. The assoiation is in receipt of a government grant which it spends on competitions and on other educational work.

The British Columbia Poultry Association. — This provincial association groups thirty local poultry societies, one having been affiliated in 1917 while four lapsed. Although the number of adherent societies thus fell by three there was no change in the total membership.

A chief activity of the individual societies is the co-operative buying of poultry-foods which most of them practise. They are grouped in ten districts in each of which a poultry-show is held. The show at Vancouver receives exhibits from the whole province and is one of the most important poultry-shows in West Canada. The local societies send delegates to the annual meeting of the provincial association.

This latter published in 1917, as in 1916, a very useful directory of poultry breeders.

The British Columbia Goatbreeders' Association was founded only in 1916. The fact that in 1917 its membership reached 176 shows that it supplies a real need. Its work has been largely directed to improving breeds of goats. Thus it has helped the importation of purely bred stock by refunding freight; and with the co-operation of the Dominion government it has inaugurated a registry for purely bred goats, and has procured a visit to the province of a representative of the Live Stock Commissioner at Ottawa who has inspected milch goats and made records of their value as foundation stock. The association has also advertised in various ways the value of milch goats.

The British Columbia Beekeepers' Association is growing rapidly and now has a good membership. Its object is the development of right methods of beefarming in the province, and the advertisement of the excellent honey produced which will, it is hoped, eventually become an article of

export. The association sent an exhibit of good quality to the Vancouver exhibition.

The Vancouver Island Flockmasters' Association aims at improving the breed of sheep, at grading and classifying wool, and at selling graded and well packed wool co-operatively. It reports a good year of business in 1917.

FRANCE.

THE CO-OPERATIVE SOCIETIES FOR BRINGING LAND UNDER CULTIVATION. — Communicated by M. Louis Tardy to the *Académie d'Agriculture de France* (*Comptes rendus des séances de l'Académie, séance du* 8 *janvier* 1919).

The Academy of Agriculture of France has thought it worth while to ascertain the results obtained by the co-operative cultivating societies, of which we have already noticed the origin and progress (1), and M. Louis Tardy, the academy's correspondent, has made an enquiry of which the fruit can be resumed as follows:

Co-operative Cultivating Societies of Haute-Garonne. — The seven co-operative societies for the cultivation of abandoned lands formed in Haute-Garonne brought 135 hectares under cultivation in the spring of 1917 and sowed 353 hectares during the year. The estimates made on 30 November 1917 anticipated a profit of 34,104.46 francs, but it was only at the end of 1918 that the profit for the two years 1917 and 1918, taken together, could be distributed among those interested. These co-operative societies have had to overcome difficulties of all kinds. They first employed re-educated partially disabled men, who had given them the greatest satisfaction when they were suddenly withdrawn at the end of 1917. At the beginning of 1918 not one of the foremen, on whose training much trouble had been spent, was left. In the same way yokes of horses and their harness, which had been placed at the disposal of the co-operative societies by the military authority, were withdrawn in the beginning of 1918. It was therefore necessary to make a new search for labour and to buy draught animals. Some discharged mutilated men returned to their places in the service of the co-operative societies after they had been set free from the army. It has also been possible to instal refugee families on some farms and a larger use has been made of Tunisian labour which has, after the necessary period of instruction, given all satisfaction.

For the 1917 sowing the co-operative societies took advantage of tractors placed at their disposal by the State, and until June 1917 they counted on the help of these for the preparatory tillage of 1918, but at the very moment at which the number of hectares to be sown was being increased the tractors were withdrawn. To compensate for this withdrawal the

(1) See our issues for July 1917, page 22; June 1918, page 463

societies bought five new tractors, but these were not delivered until December 1918 when the sowing season was about to end.

Moreover the Tunisian labourers, who had been trained with much trouble, were suddenly withdrawn, which meant the simultaneous loss of 70 labourers.

In spite of all these difficulties the results of the year 1918 were very encouraging. On the 30th of last August 807.74 hectares were being fully farmed, namely :

172	hectares	planted	with wheat,
264	»	»	rye,
53	»	»	buckwheat,
25	»	»	maize,
21	»	»	potatoes,
200	»	»	forage plants,
39	»	»	vines,

and the rest with vetches, haricot and other beans, garlic, etc.

Although only 807 hectares 70 ares gave a yield, it was decided that the 1,470 hectares of which the cultivation had been begun should be allowed to share in the distributed profits. The Departmental Committee for the Cultivation of Abandoned Lands considered that if it had not been able to bring under cultivation all the farms entrusted to it, there was nevertheless occasion to make all landowners who had ceded their lands to the co-operative societies participate in the results obtained. It was also thought necessary to let the workers themselves profit by these results, and 20 per cent of total profits or 18,094.86 francs were distributed to labourers and employees. A certain number of landowners have again found the labour they need and have asked to be allowed to resume occupation of their lands. The committee has hastened to satisfy their desires; and thus 110 hectares 50 ares of land have been returned to three land owners, one of them being thus enabled to sell his property at a profit and the other two to resume the management of their farms. The settlement with these three members was made very easily and to the satisfaction of all concerned.

The profits distributed in 1918 reached the sum of 99,620.11 francs. The excessive dryness of last summer, the difficulties connected with labour, and the delays in using the State tractors gave rise to a noticeable reduction of the results recorded. The persistent dryness provoked notably a large diminution in the buckwheat crops, the weeded crops and especially the potato, haricot bean and maize crops, and reduced the value of harvests by from 80,000 francs to 90,000 francs.

However the results obtained were very satisfactory. The 1,470 hectares admitted to share in the distribution were valued at 1,486,800 francs by the commission entrusted with this valuation. Net produce equal to 6 per cent. of the value of the land ceded by the members was therefore ceded. Superior results would have been obtained if the costs of the

preparatory tillage of the lands yielding no harvest in 1918 had been taken into account, an expenditure estimated as 50,000 francs for which there was no compensation since the lands in question will not bear until 1919. The revenue would have been almost doubled if only the lands which really produced had been taken account, instead of extending the advantages of the results obtained to lands accepted by the committee but not completely brought under cultivation.

The balance-sheet of all the co-operative societies showed on 10 August 1918:

Assets	868,137.42	francs
Liabilities	777,663.20	»
That is, a profit of	90,474.32	francs

Valuations were made with much caution. Thus no account was taken of the increment of value of the live stock bought at the beginning of the enterprise, although this amounts to about 9,500 francs, and stored produce was valued below its current market price. Wine, for instance, was valued at 80 or 90 francs the hectolitre, but a certain quantity of wine was afterwards sold at 100 francs the hectolitre.

The value of the lands ceded was also estimated with very particular carefulness, the value of the uncultivated and bare land being taken as basis since almost all the lands had long been uncultivated. This value was afterwards increased to suit the cases of:

1. Lands newly cultivated,
2. Existing natural meadows,
3. Artificial meadows,
4. Areas occupied by vines which could be utilized,
5. Buildings on the lands and in use,
6. Live stock and material,
7. Other values attaching to the lands.

Profits were as follows:

Co-operative society of Grenade	38,099.57	francs
» » » Fronton	14,515.30	»
» » » Castanet	26,430 60	»
» » » Léguevin	3,314.25	»
» » » Muret	14.467.85	»
» » » Verfeil	2,792.54	»
Total . . .	99,620.11	»

A common fund intended to provide for the possible losses of some societies had to be constituted with half the total profits. This common fund amounted therefore to 49,810.05 fransc. It served to meet the Auterive society's loss of 9,145.95 francs. Of the balance 20 per cent. was

taken to distribute among the staff, and the remainder, namely 32,521.28 francs, allowed 2.188 per cent to be distributed on 1,486,000 francs contributed. This 2.188 per cent. was added to the share of the half of profits belonging to each society. The final results were as follows :

	Percent of contribution	Derived from the half of profits	Derived from the common fund
To Grenade	5.453	3.265	2.188
» Fronton	4.403	2.215	2.188
» Castanet	5.620	3.432	2.188
» Léguevin	4.813	2.625	2.188
» Muret	5.858	3 67	2.188
» Verfeil	3,231	1.043	2 188
» Auberive	2.188	0	2 188

The loss suffered by the Auberive society resulted merely from the fact that most of the works of cultivation there were executed in 1918 and that lands so cultivated have not yet been able to yield a harvest.

The law of 4 May 1918 as to the bringing under cultivation of abandoned lands has moreover modified the organization of the co-operative cultivating societies of Haute-Garonne. The Departmental Committee of Agricultural Action, formed for the execution of this law, thought it could not do better than entrust the general management of the farming of lands in the department to the Departmental Committee of Abandoned Lands. The former committee therefore asked all owners of uncultivated lands who wished to benefit by the law of 4 May 1918 to intimate the number of hectares they wished to hand over. As a consequence of this invitation 5,044 hectares were offered. The committee obtained from the Ministry of Agriculture a credit of 3,000,000 francs, without interest.

In the new organization the seven former co-operative cultivating societies have been allowed to subsist and an eighth is to be formed. It has moreover been agreed that in determining the results obtained by the former co-operative societies in 1918, no account will be taken for 1919 of ploughing already done on the lands in preparation for autumn sowing, or of the costs of establishing the first vegetable-gardens which have been made more or less everywhere on the resumed farms, or of various costs of installation and provisioning. Nor will account be taken of the considerable increment of value acquired by the lands since their purchase from the stock and material now in use, an increment which much outweighs the wear of material. These various values are estimated at about 60,000 francs, but it is preferred this year to distribute small profits and to provide for the future by making severe valuations.

Of the 5,000 hectares of abandoned land the Committee of Agricultural Action has already resumed and brought under cultivation 2,500 hectares. When the procedure provided by the law of 4 May 1918 for demanding or requisitioning abandoned lands has been followed, landowners will no longer be responsible in case of losses. Profits will be divided between the co-operators and the State, for the Committee considers that the State

should participate in the profits obtained since the State without charge advances the funds necessary for the farming of the abandoned lands.

Co-operative Cultivating Society of Eure-et-Loir. — This society has now brought 533 hectares under cultivation. From the harvests of 1918 a net profit of 30,000 francs may reasonably be expected.

Co-operative Cultivating Societies of Gers, Dordogne, Vienne, Vaucluse, the Forézienne Plain and Orne. — Following the example set by the co-operative societies of Haute-Garonne and Eure-et-Loir, similar associations have been constituted more or less everywhere in all districts of France. The Co-operative society of Gers, which has only just begun its activity, has already cultivated 40 hectares; that of Dordogne has also ploughed some 40 hectares and proposes to plough 800. A society of the same kind has just been founded at Montmorillon (Vienne) and another is being formed in Lot. Two others have been formed in Vaucluse, at Carpentas and Sault: one of these proposes to cultivate a thousand and the other 193 hectares. Others have been formed in Var where they tend to multiply. The formation of important societies in Indre and Puy-de-Dome is also projected.

The Co-operative Society for Forézienne Cultivation, which is completing the formation of a syndicate for mechanical cultivation, is established in a certain number of farms on the plain of Forez. It has restored 300 hectares to cultivation. It will work to order for a certain number of landowners and contemplates harvesting on from 1,500 to 2,000 hectares next summer. It had to encounter difficulties of all kinds last summer and happily met with success. It has already wrought a notable improvement in the lodging and diet of agricultuial labourers and farm servants. These various co-operative societies have received State advances.

In passing we will notice two inte esting forms of profit sharing.

In Dordogne, in case of work done to order, the net profits realized are divided into three parts: 40 per cent. goes to the co-operative society, 30 per cent. to the tractor drivers, and 30 per cent. to the employers in proportion to the quantity of fuel each of them has used.

The contract which the Co-operative Society for the Cultivation of Abandoned Lands in the Plain of Forez concludes with a farm provides that the farm-wife will, with her family, be lodged and boarded will be paid 100 francs a month, and will be paid, in addition to her fixed wages, 10 per cent. on the dairy produce, 10 per cent. on the produce of the poultry-yard, and 5 per cent. on the sale of pigs, calves or fattened cattle, and that these bonuses may not amount to less than 800 francs or more than 1200 francs. Two thirds of the sum will go to the farm-wife herself while one third is distributed among her and her assistants. She will also have the right to 2 per cent. of the profits of the farm.

Certain farms which the co-operative society takes will serve as demonstration farms and girls will be able to spend terms on them in order to learn modern methods as practised on farms. These farms can thus be in some sort housekeeping schools.

In Orme the departmental branch of the *Union national des mutilés et réformés* wishes to form a co-operative society which would make use

of discharged and partially disabled men and farm 100 hectares including 60 hectares of arable land.

Co-operative Cultivating Societies in the Invaded Districts. — In the districts which have suffered by the events of the war, and where most frequently all boundaries have disappeared, it is almost impossible to avoid cultivation in common. The general inspection of credit and of subsidized agricultural associations took a direct part in founding a certain number of co-operative societies, but the German offensive of the spring of 1918 did not allow many of them to be really constituted. Moreover a few were associations rather than true co-operative societies. Some withdrew into the various interior districts of France. Thus the co-operative cultivating society of Courcelle-le-Comte (Pas-de-Calais) moved to Bleury (Eure-et-Loir) where it brought 200 hectares of abandoned land under cultivation, that of Juvigny (Aisne) to Issoudun where it cultivates two farms having in area of 540 hectares. Other refugees from the department of Nord formed at Fleury (Oise) a co-operative society which has farmed a farm of 250 hectares. A new co-operative society has just been formed at Crépy-en-Laonnois (Aisne). It groups from 1500 to 2000 hectares. Other similar societies will probably be constituted in the neighbourhood. A co-operative society which proposes to cultivate several thousand hectares is also being formed at Neuilly-Saint-Front (Aisne). Another has just been formed at Pont-Favarger (Marne), and the Federation of the Viticultural Syndicates of Champagne sees in co-operation a means of reconstituting the partly destroyed vineyards of Champagne.

Some former sugar manufacturers are also proposing to form co-operative cultivating societies in the north, in Oise. Those which were founded in Somme will doubtless again become active.

Thus more or less everywhere co-operative societies for restoring abandoned lands to cultivation are being constituted. These societies are in fact preparing for that redistribution of lands which is so necessary in a large number of districts, indispensable in the north and east, for restoring the devastated districts to cultivation. They have contributed in Haute-Garonne to raising once more the value of land which was being increasingly depreciated before their formation. A property belonging to a member of one of the co-operative societies in this department, which would not have found a market at 45,000 francs in 1915, was sold for 120,000 francs in 1918. As for the part co-operative societies play in increasing agricultural production and in the work of reconstruction, it is more and more considerable.

HOLLAND.

CO-OPERATIVE DAIRIES IN 1917. — *Algemeine Nederlandsche Zuivelbond. Verslag over het jaar* 1917 (Yearbook of the General Dutch Association of Co-operative Dairies for 1917).

We have already had occasion to notice (1) a somewhat rapid development of the co-operative dairy industry in Holland, and have explained in

(1) See our issue for January 1918 page 1

connection therewith the diminution in 1916 in the number of dairy businesses in South Holland. This diminution was due to that evolution in the industry which substituted steam for manual power. However, in so far as cheesemaking is concerned, many peasants are to be found who manufacture cheese at home with the help of their wives and a hired man.

In 1917 however the dairy industry could not pursue its activity without struggling against great difficulties. The war had given rise to a very grave situation. The General Dutch Association of Co-operative Dairies (F. N. Z.) and the Dutch government have had to act very prudently, in view of the various restrictions on production, trade and transport which they have had to take into account. As regards the dairy industry the three first years of the war can be divided into three periods, as follows :

1) The first period in which costs of production were not much above their ordinary level and exportation was possible ;

2) The second period in which the powers which are Holland's neighbours determined purchase prices ;

3) The third period in which costs of production became exorbitant and exportation was complicated by the difficulties in its way.

In the two first of these periods the average selling price and cost of production were still possible and losses were not considerable, but in the third period the cost of forage and other material so sent up the cost of production that the creameries worked at a loss and the profits of the cheese-factories were negligible. Only those dairy products which, like caseine, are manufactured only for exportation were fairly profitable.

In order to give an idea of the situation we reproduce a table showing the quantities of milk sent to the factories from 1915 to 1917. The figures in the table give the average per factories in thousands of kilogrammes.

	1915	1916	1917
Frisia	5,463	6,004	5,740
Groningen	2,925	5,555	3,101
North Holland	1,288	1,415	1,334
South Holland	1,021	1,212	1,133
Brabant	2,447	2,903	2,886
Guelders-Overyssel	3,853	3,856	3,385
Drenthe	2,741	2,597	2,217

Development of the F.N.Z. from 190 to 19-6.

	Total	Frisia	Guelders Overyssel	South Holland	North Brabant	Drenthe	Groningen	Brabant	North Holland
	—	—	—	—	—	—	—	—	
				Numb.r of fictories.					
1901	407	52	25	140	130	33	27	—	—
1902	421	56	26	142	131	30	27	—	—
1903	435	64	28	146	130	40	27	—	—
1904	436	65	35	140	122	42	23	—	—
1905	435	65	37	150	120	41	22	—	—
1906	445	65	38	155	116	47	24	—	—
1907	433	68	39	151	109	45	21	—	—
1908	430	76	39	147	109	38	21	—	—
1909	380	78	43	217	—	21	21	—	—
1910	380	78	47	214	—	19	22	—	—
1911	369	80	53	198	—	16	22	—	—
1912	384	82	57	183	—	25	24	13	—
1913	383	83	63	174	—	26	23	14	—
1914	454	85	68	164	—	27	25	20	63
1915	465	85	72	157	—	32	24	23	72
1916	495	87	89	152(a)	—	30	24	24	85

(a) The diminution in number does not, as we have explained in the first lines of §1, imply a retrogression.

Quantity of milk treated (in millions of kilogrammes).

1901	366	180	44	51	42	32	17	—	—
1902	411	197	53	52	48	40	21	—	—
1903	467	243	56	53	48	43	24	—	—
1904	522	281	70	56	46	47	22	—	—
1905	521	268	72	58	54	46	23	—	—
1906	558	277	78	69	61	48	25	—	—
1907	626	315	97	78	52	55	29	—	—
1908	719	361	113	88	52	69	36	—	—
1909	729	381	130	136	—	47	35	—	—
1910	756	367	152	151	—	49	37	—	—
1911	762	377	158	150	—	39	38	—	—
1912	815	369	190	135	—	42	48	31	—
1913	959	408	233	161	—	68	53	36	—
1914	139	440	251	175	—	73	63	46	72
1915	1,209	464	278	160	—	88	70	56	93
1916	1,414	322	343	184	—	93	85	70	117

Diminution of the production of butter in the six first months of 1917 *compared with the same months in* 1916.

	1916	1917
January	3,352,912	2,579,079
February	3,963,306	2,590,717
March	4,063 306	3,418,460
April	6,329,414	5,200 578
May	6,399,041	5,117,215
June	7,776,132	6,990,003

There is question of a diminution of from 7 to 15 per cent., the latter figure applying to the factories in the provinces of Groningen, Guelders-Overyssel and Drenthe which have suffered most.

Altogether 42,334,558 kilogrammes less milk were treated, that is 2.65 million instead of 2.86 million per factory.

The lack of forage was one of the most serious causes which brought about this fall in production. Holland, as is known, does not produce enough forage. To speak of maize only, more than a billion kilogrammes were imported in 1916. Thus the peasants evidently could not keep their beasts through the winter, especially after the hay harvest of 1917 which was particularly inadequate. If it were necessary to adduce other causes we might note that it was impossible to import the chemical manures needed for the meadows, especially meadows on sandy soil, and that the price of primary material, implements and machinery had become really prohibitive.

But the gravest matter was the difficulty of exportation which was a result of Holland's situation.

Severity of inspection. — The demand from the countries which are Holland's neighbours was very great, especially for butter, which was unfortunately at first exported without much inspection of its quality. But it was soon seen that this situation could not be prolonged without completely endangering the good reputation of Dutch butter. The same position presented itself with regard to the cheese trade.

An inspection, much stricter than is customary, was then established, and defrauders were severely punished. After much discussion it was settled that butter and cheese should be paid for according to quality. In the course of trade with Great Britain this rule had always been followed and Germany now also insisted on it. To companies were founded — the Algimex, a general exporting company, and the N. C. Z., an establishment for centralized selling — with the specific object of controlling the quality of and trade in merchandise, within and without the country. Excellent results were obtained, for to deliver goods of proper quality was in the general interest.

Condition of creameries and cheese-factories and measures taken to prevent their ruin. — The unfavourable situation of the factories and of production became clearer at the end of 1916 and beginning of 1917. Since costs of production were continually increasing and the prices received for exported goods were fixed at a much lower level, the future of creameries and cheese factories was much endangered. On sandy soil the peasants could still keep and maintain their live stock only with great difficulty. Creameries situated on sandy soil therefore received less and less milk. At first the government forbade the use of whey for the manufacture of by-products, wishing thus to help the peasants by enabling them to use it to feed pigs, but when pig raising became, on account of the price of forage, impossible, government ordered whey to be put to other uses. Moreover the peasants had retained so few beasts that the distribution of produce to the factories and the public became difficult.

The creameries suffered more losses than the cheese-factories for they are more dependent on the quantities delivered and their manufacturing costs are much higher. Then at one time they were even obliged to give up, for distribution to the public, part of the milk which was supplied to them.

To help peasants and public it was necessary to have recourse to very energetic measures. Government had to regulate the direction of the trade in dairy produce and to fix the selling price of this produce from the time it left the dairy, first at 11 cents and then at 12 cents.

It was therefore established in the rules laid down for this object that the net price of dairy products, after treatment in the factories, should be more than 11 or 12 cents, all costs being deducted. But these arrangements gave good results only in the provinces in which the farms are situated on turf lands, and even there only for a time.

In the provinces of Guelders and Overyssel, for instance, in which sand predominates, it at once became apparent that the purchase price did not suffice to cover farming costs, and that the costs of production involved the factories also in loss after the butter had left them. In the other provinces the position was at first slightly better, especially for cheese-factories and factories of dairy products, but this improvement did not last long, and as soon as these dairies realized profits they had to pay two thirds of them to the Treasury for the fund intended for the distribution of milk. The following are some relevant figures:

On sandy soil the peasants lost on the quantity of milk they sold 36 florins per cow a year. In creameries the cost of production, counting the treatment of the milk and expenses, varied from 10.80 to 11 cents a kilogramme between April 1916 and September 1917.

For cheese factories no figures are given, but it is known that profits were very moderate, and that, as stated above, two thirds of profits had to be ceded to the Treasury.

Selling prices were however very high because butter was sold at from 60 to 100 per cent. and cheese at from 20 to 40 per cent. above ordinary prices.

It was proposed to the Minister of Agriculture that the first buying price

and price of production should be brought up to 12 cents and he agreed. But the continual decrease of the quantity of milk produced and other restrictions made this regulation insufficient. The diminished output of creameries appears from the following figures: from being 19,825,376 kilogrammes in 1916 this output fell to 17,152,111 kilogrammes in May, June and July 1917, and in the same months the output of butter fell from 42,041,000 kilogrammes — its level in 1916 — to 32,950,500 kilogrammes in 1917.

Distribution of milk to factories and the public. — In order to attain to an equal and regular distribution of milk to industry and to the public, dairy trains, which were to supply in particular the large centres of population, were first established. But owing to various difficulties they were discontinued during 1917, and the factories of dairy produce, which in Holland are usually isolated from other factories, were charged to regulate the transport of milk, and to supplement the quantity intended for the public if this were insufficient. If these factories could not accomplish this task the creameries and cheese-factories might be forced to contribute milk. But the creameries at once opposed this plan, stating that they were already overburdened with difficulties, and the cheese-factories refused to incur the obligation alone. Another arrangement had therefore to be made.

On 1 May 1917 the country was divided into zones, one lying about the large centres of population and the other comprising the rest of the country.

The price of milk at the farms was again fixed at 11 cents for both zones. The factories, and especially the cheese factories, opposed this and the minister had to raise the price to 12 cents and make it incumbent on all factories to give all their help if the quantity of milk intended for the public could not be obtained without recourse to them.

Mutual central purchase. — The greatest difficulties in 1917 were :

1) the difficulty of buying implements and machinery ;

2) the lack of coal.

It was almost impossible to find good implements ; the quality of glass was becoming worse ; boilers and centrifugal apparatus had reached exorbitant prices and it was necessary to wait months for their delivery.

The factories therefore rather chose to buy second-hand machines.

The prices of the different articles needed reached an extremely high level. For example :

	1913		1917	
Salt of soda	4.80	florins	19.10	florins
Sulphuric acid	0.18	»	0.34	»
Amylic alcohol	2	»	4.50-5	»
British coal	115	»	660	»
Limburg coal	85	»	563	»
Rennet	0.60	»	5.50	»
Oil	0.18	»	1.35	»

The goods delivered cost altogether 1,583,562.48 florins in 1917 as against 701,751.39 florins in 1916.

Direct selling department. — This department continued to develop and 209 factories had recourse to it in 1917. The quantity of butter circulated was 9.306,000 kilogrammes as against 7,341,000 kilogrammes in 1916.

Insurance. — The total value insured against accidents in 1916 was 2,022,506 florins. The members of societies insuring against accidents numbered 274. Besides the large ORV association two others were founded, one for unorganized factories and one for insurance against accidents not occurring in the course of work Eighty factories joined. There is also another society insuring implements, animals, bicycles, boats etc., which has 911 members, and finally two societies which insure against theft.

The total value insured against fire reached 4,045,000 florins, that insured against the risk of theft 1,065,000 florins.

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA

CHANGE IN MUNICIPAL INSURANCE AGAINST HAIL IN ALBERTA. — *Farmer's Advocate and Home Journal* Vol. LIII, No. 1360. Winnipeg, 16 October 1918

The Hail Insurance District of Alberta has now existed for five years. It comprises 26 municipal districts and a total area of rather more than four and a half million acres.

The losses payable by the Hail Insurance Board for damage by hail throughout the past season amounted in round figures to $160,000. The income required to pay them was derived in the first place from the flat rate of 5 cents an acre on all the assessable land in the district, a rate fixed by law and levied during the spring. In the second place it was derived by the levy of a rate per acre on all the land under crop during the season, which rate was fixed by the Hail Insurance Board on 1 October at 8 cents an acre.

The losses in 1918 were the lowest recorded since the district was formed. The losses in each of the five years were as follows:

1914	$ 191,173
1915	» 358,469
1916	» 565,897
1917	» 468,897
1918	» 158 122

During the five years the total amount of insurance carried exceeded $32,500,000. The total losses paid amounted to $1,760,000. The cost of the insurance was a little over 3 per cent. in 1918, and the average cost for the five years a little over 5 1/2 per cent.

In some particulars the present plan is not entirely satisfactory, and it will probably be recast in a new Act which introduces two radical changes. In the first place all the income required will be levied on the area under crop, so that the cost will fall entirely on those who receive the benefit. In the second place the farmer will be able to insure his crop either for $6 or for $8 an acre, or to withdraw any part or all of his crop from the effect of the Act.

In that part of the province to which the Act applies there are now about 140 municipal districts. The new Act must be submitted to the electors in each of these districts in the form of a by-law to be voted upon at the next annual municipal election which will be held in February 1919. If it be approved in 45 or more municipal districts the plan will come into force, and a hail insurance district, consisting of the municipal districts which voted for the Act, will be formed. Any municipal district formed after the next municipal election, and any municipal district which at first voted against the Act, may come into the hail insurance district at any time after the first election by voting in favour of a by-law as stated above. Any individual within the part of the province to which the Act applies, whose municipal district is not included in the hail insurance district, may have his crop insured under the Act b applying to the secretary-treasurer of his municipal district not later than 15 June. Any municipal district may withdraw after five years, and when fewer than 45 municipal districts remain the competent minister has power to disorganize the hail insurance district and wind up its affairs.

The business will be managed by a board of nine members which will have its head offfce at Calgary; and will be elected by representatives of the municipal districts included in the hail insurance district, three members to be elected every year and to hold office for three years The chairman may receive a salary, and the other members will receive $8 a day and the costs of travelling and maintenance they incur in attending board meetings.

Hay is not insured. All wheat, oats, barley, flax, rye and spelz are insured from 15 June to 15 September, and autumn wheat and rye from 1 June to 15 September.

Any person may withdraw any portion of his crop from the effect of the Act by giving notice of his intention to the secretary-treasurer of his municipal district on or before 15 June. When any insured crop is destroyed by any other agency than hail the owner may withdraw it on or before 20 July from the effect of the Act, and will obtain a proportionate rebate of the premium payable on such crop.

The indemnity payable for total loss will be $8 an acre, but any person may, by giving notice on or before 15 June, reduce it to $7 an acre and have his premium reduced accordingly. The awards will be paid within thirty days of the date of adjustment by the board, and the premium will be deducted from the award.

Every person owing land in the hail insurance district will be required to report to the secretary-treasurer of his municipal district before 15 June in every year the number of acres under every kind of crop growing on lands assessed to him. All grain crops will be automatically insured to the extent of $8 an acre unless they are withdrawn from the effect of the Act.

Notice of a loss must be sent to the board at Calgary within three days of the storm occasioning such loss. The adjuster will be instructed to inspect the injured crop as soon as possible and report to the board. If the claimant be dissatisfied with an award he may appeal to the board.

The premium for hail insurance will be levied at so much an acre only on the area under crop, and only after 15 September when the losses for the year have been ascertained. The board has authority to levy a rate sufficient to pay the costs of administration and the losses in full for the year, and to give a surplus for the year equal to not less than 10 per cent. and not more than 20 per cent. of the year's losses. An average annual surplus equal to 15 per cent. of loss will in seven years form a reserve fund sufficient to carry on the business for one year. This reserve fund is to be maintained constantly.

The hail insurance premium is payable at the same time and in the same conditions as the other municipal taxes; that is, the ratepayer must pay it on or before 15 December, and the municipal district must pay the whole amount due from its area to the board on or before 31 December.

DENMARK.

INSURANCE AGAINST HAIL IN 1915 — *Statistisk Aarbog* 1917 (Yearbook for 1917), published by the Statistical Department of Denmark Copenhagen 1907

The last statistics published by Denmark, those for 1917, give the data as to insurance against hail usually found in this publication (1). But these data do not go beyond 1915. By publishing them here and comparing them with those for 1914 we can complete the data which we have already examined and which brought us down to 1913 from 1911, the year in which the period for which we have precise figures begins.

In 1915, as in 1914, societies practising insurance against hail in Denmark numbered 15. This number has not varied for years. The distribution also is the same as in previous years, namely 5 of the societies are in the islands and 10 in Jutland.

Their membership is 84,365, namely 42,181 in the islands and 42,184 in Jutland In this particular we have to note a progress, for membership increased by nearly a thousand between 1911 and 1912, passing from 80,550 to 81,513, but lower figures had to be registered in the next two years, in 1913 only 81,201 and in 1914 only 80,673; so that the increase from 1911 to 1915 was 3,815, that from 1914 to 1915 being 3,692. This last figure is composed of various elements, for in 1914 the membership of these societies was 42,467 in the islands and 38,206 in Jutland. The island societies therefore lost 280 members while those of Jutland gained 3,978.

The risks covered reached 190,900,000 crowns, their minimum, in 1911; 192,600,000 crowns in 1915; and their maximum, 198,351,000 crowns, in 1914. This last sum is made up of 105,000,000 crowns for the islands and 93,351,000 crowns for Jutland. This comparative position was reversed

(1) For the earlier data see our issue for May 1915, page 15

in 1915 : the risks insured against hail in the whole country had then diminished by 5,751,000 crowns, increasing by 15,349,000 crowns in Jutland but diminishing by 21,600,000 crowns in the islands. In this connection it should be noted that the average risk per member, which was 2,443 crowns in Jutland in 1914, rose to 2,576 crowns in 1915, and that in the islands it was 2472 crowns in 1914 and fell to 1989 crowns in 1915. In making this comparison we use the detailed figures supplied by the Statistical Yearbook for 1915. We should state however that the yearbook for 1917, in recapitulating the total risks of 1914,places them at 180,500,000 crowns, that is 17,851,000 crowns less than the figure given in the yearbook for 1915. We will again have occasion to note divergencies of this kind regarding the premiums and various receipts and the amount of damages. As to the figure standing for risks, for the whole country there was in 1914 (estimate of the 1915 yearbook) an average per member of 2,458 crowns or (estimate of the 1917 yearbook) of 2,361 crowns, and in 1915 one of 2,282 crowns.

Premiums and various receipts were at 406,000 crowns in 1908. From that year until 1910 they underwent a heavy drop which brought them down to 120,000 crowns, their minimum. They they then rose fairly rapidly, reaching 393,000 crowns in 1914, namely 185,000 crowns for the islands and 208,000 for Jutland. This figure, so made up, is that given in the yearbook for 1915. We should at once note that in the 1917 yearbook it is given as 425,000 crowns. In 1915 this item of the accounts of insurance against hail was 695,000 crowns, that is 479,000 crowns for the islands and 216,000 crowns for Jutland. Here also we have to be content with an average per member, for the statistics give us no details as to the insured area or the kinds of crops insured. However the average premium per member for 1914 is 4.87 crowns, if the figure given in the yearbook for 1915 be taken as basis, and 5.26 according to that given in the yearbook for 1917. The detailed figures for 1914 (1915 yearbook) give an average per member of 4.35 crowns in the islands and 5.44 crowns in Jutland; those for 1915 give 11.35 crowns for the islands and 5.12 for Jutland.

The indemnities to cover the amount of *damages* followed the same course : they reached 369,000 crowns in 1908 ; were reduced to 78,000 crowns during 1910 and 1911 ; then rose again to reach 514,000 crowns in 1914 (1915 yearbook), namely 273,000 crowns for the islands and 241,000 crowns for Jutland, or 513,000 crowns (1917 yearbook); and then reached 628,000 crowns in 1915, namely 450,000 crowns for the islands and 178,000 crowns for Jutland. This maximum is reached by progressive increases, twice over considerable, as appears from the following figures ; 78,000 crowns in 1911 ; 214,000 crowns in 1912 ; 291,000 crowns in 1913 ; 514,000 crowns in 1914 ; 628,000 crowns in 1915. The average damages per member were as follows : 6.37 crowns in 1914 (1915 yearbook), that is 6.45 crowns for the islands and 6.30 crowns for Jutland ; for this year this average for the whole country is little different in the 1917 yearbook, there being a sum less by only 1000 crowns to distribute among 80,673 members. In 1915 the average damages per member were 7.44 crowns, distributed as

follows: 10.69 crowns for the islands and 4.21 crowns for Jutland. Thus since 1911 the year 1914 has been the only one in which damages have exceeded premiums. The excess then amounted to 121,000 crowns, namely 88,000 crowns in the islands and 33,000 crowns in Jutland, according to the valuations in the 1915 yearbook. According to the figures in the 1917 yearbook the total excess was only 88,000 crowns. In 1915, on the other hand, the amount of premiums surpassed that of losses by 67,000 crowns, that is by 38,000 crowns for Jutland and 29,000 crowns for the islands.

As regards the capital of the 15 societies insuring against hail, it reached 354,000 crowns in 1911 and 392,000 crowns in 1912, but has since steadily fallen, being 326,000 crowns in 1913, 236,000 crowns in 1914 and 223,000 crowns in 1915, there being thus a new decrease of 13,000 crowns in 1915 although the year was one without a deficit. It should be noted that from 1914 to 1915 the capital of the societies of Jutland passed from 162,000 crowns to 181,000 crowns, while those of the island societies which had been 74,000 crowns was reduced to 42,000 crowns during the last year which we have been able to study.

SWEDEN.

MUTUAL INSURANCE AGAINST HAIL, IN 1916. — *Sveriges officiella statistik: Enskilda försäkringsanstalter år 1916 av kungl. försäkringsinspektionen* II. Stockholm, 1918.

In 1916 the receipts of the mutual societies insuring against hail were as follows:

Premiums	182,348.81	crowns
Interest on investments	3,988.69	»
Other income	128.00	»
Balance (loss for the year)	207.48	»
	186,672.98	crowns

The expenditure, which shows a profit balance of 53,796 crowns, was as follows:

Damages, including costs of settlements	68,016.29	crowns
Costs of administration	59,721.42	»
Transferences	3,179.37	»
Other expenses	1,959.81	»
Profit balance	53,796.09	»
	186,672.98	crowns

The assets on the year's balance sheet are :

In cash	12,808.33	crowns
In the bank	120,172.55	»
In public funds	99.71	»
Receipts from previous years	41,240.78	»
Sums to be recoverered from previous years	55,819.38	»
Chattels	3,039.25	»
Various	1,216.18	»
	234,396.18	crowns

Liabilities were constituted as follows :

Reserve fund	210,055.45	crowns
Sums borrowed	20,339.59	»
Various	4,001.14	»
	234,396.16	crowns

At the end of the year 27,690 policies were in force and covered risks valued at 97,866.993 crowns. Damages were incurred in 406 cases, the largest indemnity paid being 2,197.08 crowns.

The following are the rates per thousand crowns of insured capital of the premiums of the various mutual societies insuring against hail :

Allmänna Hagelskadeförsäkringsbolaget	2.00
Uppsala läns	0.50
Östergötlands läns	1.50
Skane-Hallands	0.70
Älvsborgs m. fl. läns	6.00
Skaraborgs läns	2.00
Örebro länsr	4.00
Västmanlands läns	3.50

Part III: Credit

PORTUGAL.

THE GENERAL DEPOSITS BANK AND AGRICULTURAL CREDIT.

SOURCES:

DECRETO N. 4670, REORGANIZANDO LOS SERVICIOS DA CAIXA GERAL DE DEPOSITOS (*Decree No. 4670 as to the reorganization of the services of the General Deposits Bank*). Diario do Governo, 1st series No. 159. Lisbon, 18 July 1918.

INSTRUCÇÃES ORGANICAS DE CREDITO AGRICOLA NA CAIXA GERAL DE DEPOSITOS (*Rules organizing agricultural credit in the General Deposits Bank*). O Economista Portuguez, 2nd series, 10th. Year, No. 50. Lisbon, 12 October 1918.

QUIRINO DE JESÚS: Observaçães a respeito do Credito Agricola (*Observations as to Agricultural Credit*). O Economista Portuguez, 2nd series, 10th Year, No. 53. Lisbon, 2 November 1918.

§ 1. PRELIMINARY HISTORY.

The management of the General Deposits Bank, recognizing that this public and autonomous institution ought to take part, with all its growing resources, in the economic and social development of the country, especially in the period of national reconstruction made necessary by the effects of the European war, has prepared and put into practice, in agreement with the public authorities, such an organic reform of this bank, by means of the intensification and adaptation of its functions, as brings it into line with the needs of the country.

Such a reform was moreover indispensable owing to the following fact. Various measures have lately been taken with a view to finding a place, in this bank's business, for operations of agricultural and inustrial credit and for the discount of warrants, especially on the occasion of rural crises and of the difficulties due to a state of war; but the by-laws and rules governing this bank tended principally not only to constitute compulsory deposits throughout the country, but also to attract the savings of individuals by stimulating and facilitating voluntary deposits. The bank thus came to hold available funds which grew daily and emanated from the whole country, and were mostly absorbed by the securities of the State and of administrative corporations. If, on the one hand, investments of this kind contributed to strengthening the credit of the bank and the

State, on the other it had the inconvenience of depriving the country's productive forces of this capital, which might and should have been employed, to the profit of all, in such a way as to contribute to the development and progress of the country.

To meet these needs the decree law, No. 4670, was promulgated on 14 July 1918. This legislative measure facilates the entry of voluntary deposits into the Portuguese Economic Fund, which will form part of the General Deposits Bank, in that it grants this important bank the greatest possible autonomy, within suitable limits on a State guarantee and at the State's liability, and in that at the same time it grants it the powers necessary for the circulation by its transactions of its available capital, to the profit of the economic and social development of Portugal.

As this reorganization has been received in Portugal with the greatest satisfaction, the bank's management has, in agreement with the government, willingly given itself up to a study of the methods by which it can be realized in practice. When undertaking this reorganization the management understood that the group of transactions which called for attention more than all others, and with regard to which it could meet a need felt to a considerable degree throughout the country, was the group of agricultural credit transactions. The General Deposits Bank is therefore prepared to include in its banking business the affording of money cheaply and on good terms to farmers.

§ 2. Agriculture and the Portuguese Banks.

Although in Portugal it was becoming clearer every day that agriculture needed the capital which would allow the small farmer to introduce into his husbandry the improvements due to modern agricultural science, and also to face the deficient harvests of bad years, the problem of agricultural credit remained in instant need of solution. Such being the situation, it is easy to understand that usury wrought more and more damage to the Portuguese countryside.

The aim and the restricted field of action of the Bank of Portugal being what they were, the regulating influence of the credit and discount business of this bank was felt only in trade and in the manufacturing industry, and therefore it exercised no activity in the agricultural districts although these constitute the greater part of the country.

The banking establishments in Lisbon and Oporto, the chief centres of the country, have never done any business important to rural circles. The district banks are few in number; their capital is limited; and they are almost completely absorbed by trade and manufacturing industry. In these conditions their activity in relation to agriculture is almost nil. Moreover, the high rate of the interest on the loans of these banks ultimately drove the persons interested into the arms of the usurers.

There are indeed other institutions of a definitely agricultural character, and these alone could solve the problem of agricultural credit in

Portugal. We refer to the Mutual Banks of Agricultural Credit (1), organized by the law of 30 July 1914, in union with the agricultural syndicates. This organization is much too recent for it to begin to bear its expected fruit, especially in a country like Portugal where, in view of the psychology and the lack of preparation by education of the rural population, a vigorous campaign of propaganda is necessary in order that co-operative credit may reach a certain development. Moreover the collective character of such credit excludes from its functions, and consequently from the benefits of its loans, the whole group of the inhabitants of the Portuguese countryside, still the majority of the population, for suspiciousness or material difficulties keep them isolated and outside every association, although they constitute a very important producing element.

Thus we see that the action taken by all the institutions mentioned did not exercise a sufficient impulsion to cause the needed money to reach the country districts. Hitherto therefore Portuguese agriculture has remained in some districts in the trammels of usury, which exacts interest at a rate above 10 per cent., sometimes even as much as 50 per cent. or more. In other districts credit is completely ignored. Both these are cases of evils, and they are followed by equally negative economic results.

Faced by this situation the General Deposits Bank is placed in the conditions most favourable for meeting the needs of agriculture. It works through its Lisbon establishment and extends its activity to all districts and communes, using for this end the delegations and funds of the Public Treasury, which are legally at its disposal for all its business Moreover, as we have said, the mass of capital which it has at its disposal for its organization and official functions becomes daily greater.

Thus by combining the functions of the Mutual Banks of Agricultural Credit in the sphere of collective credit and those of the General Deposits Bank in relation to individual credit, the law is evidently intended to give rise to two parallel and mutually complementary movements, which will make it easy for Portuguese agriculture to obtain on moderate terms the capital needed for its transformation in accordance with the dictates of modern technique and economy.

§ 3. Organization of the General Deposits Bank in its Relation to Agricultural Credit.

We will now examine the form of that regulation of the bank's business which enables it to afford agricultural credit.

From the previous remarks it follows naturally that operations of this kind entrusted to this bank ought to be and are the same as those undertaken by the Mutual Banks of Agricultural Credit, with the sole difference that the latter banks, we repeat, are active in the domain of collective

(1) See the articles on agricultural credit in Portugal in our issues for April 1915, page 61 and September 1916, page 26

credit, while the domain of the Deposits Bank is that of individual credit. By Article 1 of the regulation organizing the agricultural credit of the Deposits Banks it may undertake business having one of following objects:

1) Purchase of seeds, plants and insecticides, and payments for repairs and improvements, purchase of live stock, forage, machinery and implements of labour, and vaccines and other preventives of epizooty;

2) Payment of day-labourers, payment of wages and other remuneration of an agricultural character;

3) Payment of rents, dues and contributions burdening cultivated land;

4) Extinction of mortgages or redemption of dues burdening rural property;

5) Discount of warrants issued on the security of goods deposited in general agricultural warehouses;

6) Execution of works and improvements increasing the value and yield of landed property;

7) Production, conversion, preservation and sale of agricultural produce, and insurance of harvests, buildings and live stock.

The rate of interest payable on the bank's loans is 5 per cent. per annum, the total interest being payable in advance. The term of loans will not be more than one year in the beginning, but may be prolonged, with the consent of the board of management, for another year, if application for such prolongation be made fifteen days in advance. Loans may also be made for a term of five years if the sum lent is to be used for the settlement of uncultivated lands, irrigation, etc.

The granting and repaying of loans take place only at the bank's central office in Lisbon and at all the municipal and district Treasury funds.

The granting of loans is exclusively within the competence of the bank's board of management which pronounces an opinion, favourable or otherwise, after it has studied the applications of candidates and has united all the information concerning them which it deems necessary. This information must be communicated to the bank's agricultural credit department if there is question of business proposed to the bank's central office directly.

Applications for loans to the provincial councils should first be drawn up by the parochial juntas, to whom all the applicants should address themselves, then by the special municipal committees to which the juntas transmit the applications they have duly drawn up. These committees will be formed of the secretary and treasurer of the local financial administration, the president of the municipal chamber, the president of the parochial junta, and a farmer nominated by the bank's management.

The members of these special committees will receive 0.5 per cent of the interest on the operations effected within their respective communes, which amount they will share equally at the end of the year.

Loans may be made if they be guaranteed by a pledge, a cautionary payment, a remittance of income or a mortgage; or without special guarantee if the managing board deem that the applicant is entirely trustworthy. This provision deserves special notice: it establishes personal credit in

its purest form, and meets a need of Portuguese agriculture which urgently requires satisfaction so long as the movement towards association has not reached its desired development.

Finally, the measures for the organization of the agricultural credit afforded by the General Deposits Bank establish that the borrower may at any time repay all or part of the loan he has obtained ; and that if he do so a part of interest, corresponding to the period which has to elapse between the date of his repayment and the date stipulated as that on which his loan should mature, will be remitted to him.

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We have now briefly explained the organization of agricultural credit as a principal function entrusted by the decree-law of 18 July 1918 to the General Deposits Bank, and the indefeasible necessities which this organization obeys. Before we conclude we have merely to state that economic agricultural opinion in Portugal received this organization with evident satisfaction and pleasure, and has in general judged it favourably. This is not to say that it has not been the object of some criticism as regards its regulation of the procedure for applying for and granting loans. But the bank replies to these criticisms of detail that there is question only of a provisional organization, an experiment, into which all the modifications suggested as necessary or useful by experience will be introduced.

It has also been called strange that the General Deposits Bank should receive 5 per cent. interest on its loans while the Mutual Banks of Agricultural Credit ask only 2 ½ or 3 per cent. It is necessary however to observe that it is the government which procures money for these latter banks (1), obtaining it easily by means of the trust circulation and in virtue of a contract with the Bank of Portugal ; and that in any case the system in force is provisional and has the essential aim of giving rise to a movement towards association and establishing the principle of association in the countryside. The position must change when the education of the agricultural class from the point of view of association is an accomplished fact, and the sphere of the business of the mutual banks has been enlarged, so that these latter banks have to depend only on the deposits they credit to their clients and on the lending and rediscounting business they do with other banking establishments. Then, inevitably, the mutual banks will have to raise the rate of the interest on the loans they make, for otherwise they will do business at a sheer loss On the other hand the General Deposits Bank does not depend on the State. It is an autonomous institution, although the State watches over it and guards it, and consequently it assumes its own liabilities Since it pays 3.60 per cent. to its depositing clients, and since its administrative costs are fairly high, especially now when there is question of creating new branches of activity, it is impossible for this bank to lend its available funds at a rate of interest less than 5 per cent. In any case

(1) See the article mentioned

this rate is moderate enough as compared with the 8 per cent., 10 per cent., 20 per cent and 50 per cent. which usury exacts from the country people.

Finally we would say that the estimate mad. of this new organization of agricultural credit in Portugal is synthetized in the following pronouncement of the eminent Portuguese economist Quirino de Jesús, editor of *O Economista portuguez*: " At this exceptional time, in which the first public and patriotic necessity, one which embraces the whole near and remote future, is the intensification of tillage and the better utilization of the soil, the initiative taken, in making available for the supply of this necessity a large part of the available funds of the General Deposits Bank, is not only consistent with the highest ideals of the bank's management, but should also give rise to the most exalted and well founded of hopes, and should be used for the best ends by the farmers of the country, thanks to the propaganda work which those fit to undertake it are to carry out among the rural element of the population ".

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

CANADA

CREDIT FOR SOWING IN THE WESTERN PROVINCES. — *The Agricultural Gazette of Canada*, Ottawa, November 1910.

The Minister of the Interior has just addressed himself to the chartered banks of Canada in order, in the name of the colonists settled on unpatented federal lands, to come to an agreement with them which will enable these colonists to find in these banks the funds necessary to them for providing themselves with the seed they need. The help given takes the form of loans which bear interest at the rate of 7 per cent. per annum, the Minister of the Interior guaranteeing the capital and interest at the rate of 5 per cent.

Every settler who wishes to procure seed should apply to the secretary-treasurer of the municipality within which he dwells, or, if the district be not organized, to the provincial officer of the Department of Municipal Affairs. Such applications are made on forms supplied by the Minister of the Interior. The municipal officer or the representative of the provincial government verifies applications and transmits them to the agent of Dominion lands of the district in which the applicant's land is situated. This agent should also verify the applications in so far as he can, and if any seem to him unworthy of acceptance should send an inspector to make on enquiry. He then sends any application to which he has affixed his opinion to the Chief Inspector of Dominion lands Agencies at Winnipeg, where it is verified once more. The chief inspector then sends two copies of a lien on the land in question, together with a note of his approval of the proposed loan, to the bank indicated in the application.

On receipt of these securities the bank advises the applicant, who then signs a note, to which the lien is attached, as authorized by clause 88 of the bank Act. The applicant also signs a duplicate lien, of prescribed form, in favour of the Minister of the Interior who acts in the name of the Dominion of Canada. The bank then transmits the lien to the Department of the Interior and gives the applicant an order of prescribed form. The order is so drawn up that it can be used only for the purchase of seed, but it is negotiable, by the person who sells or delivers the seed to the applicant.

In response to a written request addressed to the Minister of the Interior by the bank before 1 May 1910 — unless a delay be granted by the minister —, the principal part or the whole of the sum advanced on the aforesaid bill will, if it be still owing, be repaid to the bank by the Ministry of the Interior, together with interest at the rate of 5 per cent. per annum if interest have not been paid by the applicant.

The banks may be authorized to receive commission of 1 per cent. on the total amount of the loans they make in virtue of the provisions we have resumed.

DENMARK.

THE WORKING OF DANISH ASSOCIATIONS OF LAND CREDIT IN 1916-17 AND 1917-18.

In continuation of our earlier notes on land credit and mortgage associations, published in our issue for January 1917 (page 70), we will now give some information as to the working of all these associations taken together in 1916-17 and 1917-18. A less superficial knowledge of the individual accounts of some of these associations can be obtained from the Statistical Yearbook published by the Danish Department of Statistics.

On the basis of the accounts of the land credit and mortgage associations this department has drawn up a statement as to the activity last year of all Danish associations of this kind

This statement covers twelve land credit associations which grant loans only on first mortgages and nine mortgage associations which grant them on second mortgages. To these are added the land credit association of the communes of Denmark and the mortgage department of the Danish Agricultural Bank which grant both mortgage and communal loans.

Four of these credit institutions balanced their books on 31 December 1917, one of them on 10 March 1918, all the others on 31 March 1918.

The following figures give information as to the total sum of loans, both on the original mortgages and on those still current at the beginning of 1918.

Total loans granted at the beginning of 1918:

	Total number of mortgages	Original mortgages. Thousands of crowns	Current mortgages. Thousands of crowns	Average current mortgage per loan. Crowns
	—	—	—	—
12 associations of land credit	258,789	2,135,651	1,961,548	7,600
9 mortgage associations	29,015	175,009	160,332	5,500
The mortgage department of the Agricultural Bank:				
mortgage loans	1,200	—	16,909	14,100
communal loans	438	—	29,160	66,600
The land credit association of the communes	768	35,262	29,199	38,000
Total	290,210	—	2,197,140	—

As to the part played by all the associations of land credit taken together in granting mortgage loans on real estate, we may note that, according to the valuation made in 1909 by the administrators of the land tax,

about half the country's mortgage debt was distributed among lending associations of this kind, the rest among banks, savings-banks, institutions of insurance, private lenders, etc. The figures given below will moreover show that about 90 per cent. of the mortgages invested in the association in question is held by the land credit associations.

The following figures show the increase and decrease of mortgage loans in the last two years. After 1915-16, which was a very uneventful year, there was in 1916-17 a very large increase in the mortgage loans, so large that the mortgage debt was considerably swelled although the number of the loans was even smaller than in 1915-16. This situation remained almost constant in 1917-18; but redemptions played a less important part in the business of the land credit associations than in the previous year, so that the increase of the mortgage debt was much larger in 1917-18 than in 1916-17.

		The 12 associations of land credit		The 9 mortgage associations	
		1916-17	1917-18	1916-17	1917-18
Loans repaid	Number	11,455	9,149	1,474	1,735
	Initial capital in thousands of crowns	68,887	53,364	4,867	4,813
Loans made	Number	11,485	11,947	2,346	2,688
	Initial capital in thousands of crowns	127,605	127,812	22,232	21,166
Net increase	Number	30	2,408	872	953
	Initial capital in thousands of crown	58,718	74,448	17,365	16,353

The following figures, which refer to the average amounts of the loans made in the last three years, show that the associations restricted the amount of their loans in 1917-18 in spite of the rise in the price of real estate.

		Land credit association	Mortgage association
Average loan in	1915-16	10,500 crowns	7,500 crowns
"	1916-17	11,100 "	9,500 "
" "	1917-18	10,700 "	7,900 "

In 1917-18 new land credit paper was issued up to the amount of about 128,000,000 crowns and mortgage paper up to that of about 21,000,000 crowns. At the same time the mortgage department of the Agricultural Bank and the land credit association of the communes lent more than a million crowns. Altogether there was a total issue of more than 150,000,000 crowns, that is to say about the same amount as in the previous year but nearly twice as much as in 1915-16 in which year issues amounted to 80,000,000 crowns. In 1916-17 paper previously issued by the associations was cancelled up to the amount of about 85,000,000 crowns, but in 1917-18

the cancellation was only for slightly more than 70,000,000 crowns, lots being drawn for about 19,000,000 crowns thereof.

In the beginning of 1918 the total liability of the associations for paper issued amounted to 2,141,000,000 crowns, that is to say to about 99.53 per cent. of the debtor's liability.

The paper issued by the land credit associations bears interest as follows:

	1916-17		1917-18	
	Land Credit Associations Thousands of crowns	Mortgage Associations Thousands of crowns	Land Credit Associations of communes. Thousands of crowns	All the associations. Thousands of crowns
3 % per annum	3,118			3,118
3 ½ % per annum	370,638			370,638
4 % per annum	886,315	—	7,641	893,956
4 ½ % per annum	683,238	27,551	21,551	732,670
5 % per annum	9,196	131,145	—	140,041
Total	1,952,505	159,036	29,192	2,141,023

The average annual rate of interest on all the loans, taken together, is 4.08 per cent. in the case of the land credit associations, 4.91 per cent. in that of the mortgage associations, and 4.37 per cent. in that of the land credit associations of the communes. There is no corresponding statement referring to previous years.

In the beginning of 1918 the land credit and mortgage associations possessed altogether about 104,800,000 crowns as against 99,700,000 crowns in the previous year. Their capital thus increased by more than five million crowns, that is to say by 5.1 per cent. as against 4.9 per cent. between 1916 and 1917 and 5.6 per cent. between 1915 and 1916. The sum stated includes however the original contributions of those interested which are, in most associations, wholly or partially repaid when the loans are repaid.

The following is a statement of the most important items of receipt and expenditure in the last two years:

	Receipts of the 12 associations of land credit. Thousands of crowns		Receipts of the 9 mortgage associations Thousands of crowns	
	1916-17	1917-18	1916-17	1917-18
Ordinary payments of debtors	2,976	2,950	656	756
Contributions of new debtors	2,650	2,629	656	622
Interest	4,005	4,052	346	430
Other receipts	674	726	303	37
Total receipts	10,305	10,357	1,961	1,815

	Expenditure of 12 land credit associations. Thousands of crowns		Expenditure of 9 mortgage associations Thousands of crowns	
	1916-17	1917-18	1916-17	1917-18
Administration	2,219	2,519	453	518
Subscriptions repaid	4,165	3,313	176	519
Loans on real estate burdened with real estate rights	16	54	36	25
Various	213	9	100	80
Total expenditure	6,610	5,805	765	1,180

The interest figuring in the receipts comprises deferred interest and also the fines, dues, etc. which it has been impossible in the case of several associations to separate from deferred interest. Receipts properly so called may be estimated at more than 4,000,000 crowns. Since capital increased by more than 5,000,000 crowns other receipts were well able to provide for current expenses.

In the following table we show the average amounts of the ordinary payments of debtors, of costs of administration and of losses per thousand crowns of the original capital.

	Average for the 12 associations of land credit		Average for the 9 mortgage associations.	
	1916-17	1917-18	1916-17	1917-18
Ordinary payments of debtors	1.41 crowns	1.43 crowns	4.64 crowns	4.64 crowns
Costs of administration	1.58	1.22 »	3.20 »	3.26 »
Losses	0.01	0.03	0.25 »	0.16 »

These figures prove that the costs of the loans on second mortgages are considerably greater than those of the loans on first mortgages of the land credit associations. This is because the administration of mortgage associations is relatively more costly because the loans are smaller. Moreover the mortgage associations run a much greater risk than the land credit associations.

URUGUAY.

RULES FOR THE EXECUTION OF THE LAW AS TO AGRICULTURAL PLEDGES IN URUGUAY — *Diario oficial*, No 3705. Montevideo, 27 August 1918.

We have already examined the new law constituting agricultural pledges in Uruguay (1) and have shown its special importance from the point of view of agriculture. The official gazette has just published for

(1) See our issue for August 1918, page 664

the execution of this law a regulation which contains particular provisions and rules governing the drawing-up of the contract of pledge. We must therefore complete our examination of the law by resuming the most important provisions of this regulation.

Regular trade book-keeping. — In order to explain what is established by Article 4 of the law, namely that the transaction of making an agricultural pledge can be undertaken not only by the Bank of the Republic but also by other credit establishments and commercial institutions having their books in order, the regulation establishes that these establishments and institutions should notify that they have submitted their books to the notary of the commercial courts of Montevideo or of the corresponding court in another department, and that this notary will testify that the books are kept in accordance with the provisions of the code.

Similarly, in order that a contract in favour of traders may be registered in accordance with the law's provisions, a certificate issued by this notary and testifying that the trade books are regularly kept must be delivered at the registraton office.

The obligation to keep books regularly is also incumbent on traders who sell articles which might form an agricultural pledge and occur in the list in Article 3 of the law.

Form of contracts and conditions requisite. — As regards the form of contracts and the requisite conditions, the regulation distinguishes between those bearing a private signature and those passed before a public official. No form is established for the latter; but the regulation establishes that the former must be drawn up on a special form, containing a statement of the amount of the debt, the interest payable on it, the value of the pledged goods, the date — as in the case of letters of change — of acceptance which coincides with that on which the contract is drawn up, the date on which the debt falls due, and the specification of the sum in cash received as a loan on the security of the pledge. There follows a description of the articles pledged, showing their quality, quantity and position ; a declaration as to charges burdening them and as to the borrower's debt for rent, distinguishing between debts in cash and in kind ; a specific statement as to the creditor's rights of inspection ; and data as to the insurance of the property. On the back of the form there is an endorsement formula which must be signed by the endorser and the bearer.

In a loan contract secured by pledged live stock all the characteristics of the pledged stock must be given and must be accompanied by a description of the condition of the places in which this stock is to be found and which must be absolutely free from every kind of cattle-disease.

Contracts passed in the presence of a notary must also contain, in addition to what is prescribed by Article 9 of the law, the data and formulas mentioned above.

Registration of contracts. — In order that contracts drawn up in any form may have an effect, as regards both the contracting parties and others, they must be entered in the registers of the districts in which lie the land on which the pledged articles are situated.

In the case of contracts drawn up in the country the regulation establishes that, in addition to the formalities mentioned in the law, the contract must be entered in the register of the notary of the departmental court in order that it may be valid.

Contracts of pledge drawn up in Montevideo and the capital towns of departments shall be entered in the local registers or at the notary's office, but are not valid unless they are entered in the register of the place in which the pledged goods are situated.

The contracts of agricultural pledge stipulated under a private signature must be entered in the registers, in the manner stated, by the care of one of the contracting parties. If one of the contracting parties cannot sign, one of the witnesses will sign the contract in the presence of the official responsible for keeping the register.

A contact bearing a private signature must be presented to the registration office in four copies. One of these copies must be crossed with the words " unnegotiable copy ", written very clearly.

The registration official will mark the three copies as authentic and return the original to the person interested. The copies are used within the offices. The officials responsible for keeping the register of agricultural pledges must, without charge, testify before the entry is made as to whether the goods to be pledged are already burdened with other charges to which priority attaches or already pledged. These same officials are bound at any moment to inform the banks if a contract creating an agricultural pledge on the property of a determined person exist.

Transfer of credit by endorsement.— As established by Article 18 of the law a certificate of agricultural pledge is transferable by endorsement. The law adds that a note of it must be taken in the office in which the contract is registered, this contract being presented, or a written declaration, signed by the endorser and the bearer, being sent by registered post to the official responsible for keeping the register and its receipt acknowledged.

Rights and powers of the creditor.— While the contract is in force the creditor will enjoy a right of inspection over the property which is the object of the pledge. The date and form of the inspection will be specifically determined in the contract; and the persons responsible for making the inspection will be named therein if the creditor do not make it himself.

If stock and arable farms or industries annexed to them be in question, the inspection must be entrusted to agricultural experts.

If the form the inspection is to take be not established in the contract, the creditor has the right to make it himself according to the form he thinks most suitable or to depute other competent persons to do so. In this case he will bear all the costs of the inspection. Creditors or other duly authorized inspectors may summon the aid of public authority if the debtor totally or partially prevent the inspection of the thing pledged.

It may moveover be laid down in the contract that the debtor is obliged to supply his creditor periodically with a description of the things pledged. If there be question of live stock the debtor may fix the form of the sale of the animals and the products derived from them, the sale to be made

at a fit time, the price to be appropriated to the payment of the debt, and the sale to be noted in the relevant certificate.

If an inspection of pledged property show that the security has depreciated so that it is no longer a sufficient guarantee, the creditor may exercise his rights in accordance with the laws in force.

Landowner's privilege. — As regards Article 8 of the law, which provides that the pledge does not prejudice the landowner's privilege with regard to a year's rent already due, on condition this rent or the relevant contract have been entered in the *ad hoc* register before the contract of pledge, the regulation establishes that the creditor holding a pledge may insist that the debtor produce a certificate of the entry in the rents register or may himself demand such a certificate from the competent office.

Cancellation of pledge. — The cancellation of a contract of pledge is made in the margin against the entry and can be effected by a judicial decision, with the consent, manifested before the officials responsible for the register, of the contracting parties, and by means of a presentation of the original contract on which the payment of the debt must be attested.

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The new law as to agricultural pledges, which we have already noticed as opportune, is thus completed by this regulation which determines in minute detail all the formalities with which a contract must comply.

These specific rules are justified by the delicate nature of the contract. It must have clear and precise formulas in order that it may safeguard the rights and interests of the parties concerned, especially those of creditors and of third parties.

This formal precision will certainly favour the use of contracts of this kind, which will eventually form one of the securities for credit most generally in use, to the evident advantage of trade in general and agricultural trade in particular.

Part IV: Agricultural Economy in General

CONGO.

AGRICULTURAL SETTLEMENT IN BELGIAN CONGO.

SOURCE.

E. LAPLAE (General Director of Agriculture at the Colonial Ministry): *Notes au sujet du développement de l'agriculture belge*, published as a supplement to the *Tribune congolaise*, 1917-1918.

§ 1. GENERAL INTRODUCTION.

The Belgians undertook the organization and administration of the Congo thirty years ago, without having any colonial experience. From the special point of view of agriculture difficulties were great, for agricultural experience is acquired only slowly and at a high price, even in these days in which all means of progress are available. Added to this is the fact that the Belgians have had less recourse than other colonizing peoples to the experience of their predecessors. This peculiarity made their activity more original and bolder but cost them the loss of many illusions.

When Belgium annexed the independent State of Congo she established a very progressive economic policy there. Much latitude was given to the colony's agricultural departments and very considerable credits were placed at their disposal. There were laboratories of agriological study, laboratories of mycology and applied entomology, a laboratory of veterinary bacteriology, a large equatorial botanical garden which was developped by the addition of an immense experimental garden, and some twenty agricultural and stockbreeding experimental stations. The State organized European land settlement in one district, supporting almost the entire cost, and also plantations of indiarubber (principally hevea), cocoa, coffee, palm-trees, fibre, fruit-trees, etc., extending over more than 4,000 hectares and cultivated directly. This is to leave out of account several thousand hectares, since abandoned, which had been planted with tropical creepers and funtumiae by military or native labour or by concessionary societies who had afterwards ceded the land to the State. In fact the agricultural enterprise of the Belgians in their colony was most intensive and also most costly. In the first years the agricultural departments continued the plantations on a large scale which the independent State had begun, and they employed nearly 200 European agents and from 16,000 to 17,000 natives. Work was still done at this time by means of enormous brigades of native labourers, and the expense was the greater because Belgium had, from the outset, notably raised the wages of negro labourers.

As soon as the anti-economic conditions of work on this system became apparent, the number of the plantations and of the staff was considerably reduced, and only those properties were maintained which could serve as experimental stations, that is to say which could allow of experiments on a scale sufficient to give trustworthy results and possessing a real educative value from the point of view of Belgians and foreigners who wished to establish themselves in the colony as planters.

Thanks to persevering work, and in spite of numerous obstacles, very satisfactory results have for some time been obtained in certain cases, and very encouraging results in others. Since plantations, like land settlement, aim not only at cultivation but also at the realization of economic or financial results, they have occasioned much trouble and been much criticized. But in the end the desired results have been obtained.

After having devoted the three or four first years almost exclusively to the meteorological and agricultural study of the colony, to a systematic and patient search for the best methods of tillage and stockfarming, and to the investigation of the remedies and preventives of sickness, it was considered that the ground had been cleared sufficiently to allow the study and development of native agriculture to be begun, an undertaking strongly recommended by the territorial department and the Governors General.

We will now consider more closely the agricultural question, and the studies, the experiments and the accomplishment which it has hitherto been possible to record. In making this examination we will distinguish between two absolutely distinct enterprises, namely agriculture in hot districts and Belgian agricultural land settlement in the temperate regions of Katanga.

§ 2. Agriculture in the hot equatorial and tropical districts.

These districts include almost the whole area of the colony. The heat is however great to a trying extent, as in the Gabon, only in the maritime district, the estuary of the river. Boma itself, the capital of the colony, has the most trying climate. As soon as the interior is entered the ground rises rapidly. Nine tenths of the colony's territy lie on a Central-African plateau which rises towards the Great Lakes, so that one passes from an altitude of 300 metres to one of 400, 1,000, 1,200, 2,000 and even 2,500 metres. Snow is frequent on the volcanoes of Kivu, and the mountain of Ruwenzori is capped with eternal snow and ice.

The richest districts agriculturally are at an altitude of 300, 400 and 500 metres and the agriculture of equatorial countries is practised in them.

It was necessary to begin by adapting the Department of Agriculture to these conditions and this was not at first easy. On the one hand the independent State seemed to have confused agriculture and botany in a regrettable way, and decisions regarding agriculture had often been inspired by learned men who knew nothing of either agriculture or the colonies, and who attached more importance to herborizing than to the prosaic but urgent study of the manner in which African crops could be made to yield a profit.

When this first corner had been turned, by forbidding herborizing temporarily and by giving very precise instructions as to the new direction of agricultural research, a second difficulty appeared. The study of climate and soil had hitherto not existed ; data obtained from the measurement of rainfalls were insufficient or fictitious and could not serve to direct the course of experiments with new cultures. The agricultural knowledge of a large part of the agricultural staff was much limited. The lack of precise information had caused the establishment of large plantations of rubber-trees in lands in no way suited to them, and an effort was being made to extend cotton growing in very unfavourable climates.

First, a large number of meteorological stations were set up, the chief of them being equipped with registering apparatus for all observations. Next two laboratories for the analysis of soils, chemically, and physiologically by means of pot cultivation, were established and provided with a competent staff. An agricultural engineer was appointed for special agriological studies. The whole enquiry thus enabled seems to have proved that the soils of the Congo are most lacking in azote and phosphoric acid, that azote is imparted to them easily in the form of green manures, but that phosphates must be obtained by trade.

The departments for the study of plant diseases (applied mycology and entomology) and the bacteriological study of the diseases of domestic animals were organized in three separate laboratories, placed in the botanic garden of Eala and, for veterinary bacteriology, in the great breeding stations of Zambi in which the State keeps domestic animals of a large number of races coming from tropical regions in various parts of the globe.

The long and costly business of training a competent staff for the agricultural departments has moreover been begun. Since the Belgians had no colonial experience, the Colonial Ministry decided that the best agricultural experts should be sent to foreign colonies on missions of study. Some fifteen agents were sent to British India and the Dutch Indies, the Malay, East and South Africa, Angola, San Thomé and the West Coast of Africa ; and veterinary surgeons spent terms in the laboratories of Nairobi and Pretoria. The experimental stations were provided with libraries, and the Central Direction of Agriculture began the publication of a quarterly review, the *Bulletin agricole du Congo belge*, which was intended to instruct the agents as to a thousand details of agriculture, to enlarge their minds by descriptions of foreign agricultural methods, and to inform other administrative departments in the colony, as well as colonists, planters and missionaries, as to the researches conducted and the results obtained by the Department of Agriculture. By these means a nucleus of competent agricultural experts was secured.

Agricultural propaganda is now being organized. The State plantations and their accounts are at the disposal of colonists, and the Colonial Ministry has decided to admit to these plantations, for a term of one year and largely at the cost of the State, Belgians who wish to acquire practical knowledge of colonial agriculture on a large scale. Twenty such students can be admitted every year.

As regards native agriculture, the following system has been adopted and is being organized.

Every commissioner of a district or a less area has at his service a district agricultural expert, charged to advise him and to help him in all agricultural matters. The experts first study the agriculture of their districts, drawing up with regard to them *agricultural monographs* of which a fairly large number have already appeared in the *Bulletin agricole du Congo belge*. This work implies a greater or less number of monographs for one district, each bearing on the agriculture practised by a native population or race.

After making these studies the expert decides on the crops of which the cultivation might be developed or introduced, first to ensure a food-supply for the natives and to prevent the famines which used to be so frequent a consequence of the improvidence of these primitive peoples, and secondly to establish in the district the cultivation of one or preferably two or three crops for purposes of exportation, thus enabling the native population to improve its economic and social condition permanently.

But because the African is so indolent that he works only when he is obliged to do so, and because he can be civilized only by means of work, legislative measures have been taken in the order of 20 February 1917 which allow natives to be compelled to accomplish every year, within their chief's district and exclusively for their own profit, productive labour, ricegrowing, or the plantation of crops for exportation, such compulsory labour occupying no more than sixty days a year or five days a month. In 1917 a first trial was made of this plan in the case of rice and of cottongrowing. Excellent results were obtained. Hitherto the advice of the territorial authorities has sufficed to cause considerably extended cultivation; and the profits realized by the Arabianized farmers of the interior, where the experiment was made, amount to more than 3,000,000 francs.

In support of this propaganda, there have been erected at landing-places workshops of which the first have, each of them, a mechanical power of 75 h. p. Rice and cotton are here husked mechanically, etc.

The question of the agricultural instruction of natives is at last being considered. The best workmen in the experimental stations receive certificates of aptitude, which allow them to act as monitors in agriculture. A certain number of practical schools of agriculture will soon be in existence, and in these young natives, chosen from the sons of chiefs and notables, will practise for two years for their own profit the cultivation of new varieties and species of crops, and will learn the processes most essential to the maintenance of the fertility of the soil.

§ 3. Agricultural land settlement in Katanga.

In the south-eastern corner of the colony, around the rich coppermines of Upper Katanga, the land reaches an altitude of 1200 and 1300 metres. It is a poor land, covered with a melancholy forest, infected with tse-tse. The rains last six months; from June to October or November it does not

rain and the day temperature is round about 25° centigrade, while the nights are fresh and restoring and ice and hoar frost appear in the valleys. The climate is excellent for Europeans, and this fact decided the government to make there in 1911-12 a first experiment in European colonization.

As early as 1909 a group of colonists had in fact, at the request of King Leopold II, constituted a colonizing company, the *Compagnie foncière agricole et pastorale*. This disposed of a capital of 1,000,000 francs and received a concession of 75,000 hectares, afterwards extended to 150,000 hectares, on condition farms were organized and Belgian colonists established on this land. The company showed much initiative. It prospected the lands of the mining districts, began the farming of seven or eight farms, and acquired in Rhodesia a herd of more than 800 head of cattle which was established on the plateaux of Biano, the only part of the mining region which was exempt from tse-tse.

But it soon appeared that the capital and resources of the company were very inadequate to the realization of Belgian agricultural land settlement in so difficult a country, one still a wilderness and a desert and lacking every thing, unable to victual itself or supply itself with tools save by paying very high costs of transport. Except for reasons of national interest no one would have dreamt of attempting agriculture there for several years.

When the situation defined itself the government, convinced of the necessity of acting and of the posibility of success, became responsible for the Belgian colonization, and eventually, in 1912, bought back from the company its initial plant and stock.

At this time, 1911, the railway had just reached Lubombashi, and the State began to build, in the sad forest which dominated the river and the embryonic works of the *Mining Union*, a complete new town, vast and well designed : its great avenues and numerous buildings rise on one of the most desolate sites of the heart of Africa. Thus Elisabethville was born.

In order that the great works the town entailed should not monopolise attention and credit to such an extent that preparation for agricultural colonization would be arrested, this colonization was entrusted for two years to a special mission, which was chosen from the agricultural staff and active until December 1912.

In the beginning the mission received important credits and they were eventually further increased. Expenditure was considerably enlarged by the circumstance that it was desired that almost all the work should be done in two or three years.

Two methods might have been followed in order to establish bases for colonization. Effort and expenditure might have been distributed over a large number of years ; or all available resources might have been condensed in two or three years, so that the conditions necessary for the subsistence of the first colonists might be produced rapidly. This second method, which was also applied to the establishment of the town, seemed to be the only one which met the needs of the moment, since it was necessary to obtain results as rapidly as possible.

The Agricultural Mission therefore recruited a fairly numerous staff, partly borrowed from the colony's agricultural department, and it acquired considerable material in Belgium and South Africa — agricultural implements and apparatus, seeds and plants, collapsible dwellings and storehouses, vehicles, etc. After having ascertained the special conditions of agriculture in the mining region, the mission ordered in Great Britain one ample equipment for clearing land and ploughing by steam and bought another in Belgium. The work began with the clearing and sanitation of some land which was near the railway so that the workers were easily victualled. Then the first colonists were brought from Belgium, arriving in Katanga towards the end of 1911. Others followed in 1912. They included some thirty adult men, among whom it was necessary to expect considerable wastage.

The colonists were at first provisionally installed in the two centres of Bellefontaine (Tchinsenda) and Niewdorp (Kasumbalesa). This measure was indispensable in order that the colonists might familiarize themselves with conditions of life and labour in Africa before they established themselves in isolated farms in the bush. In these centres there were agents of the mission, responsible for the work and interests of the colonists, a Belgian doctor, and a Belgian priest who served a chapel and kept a small school, several of the colonists having brought their children with them.

As gradually it appeared that colonists had been sufficiently initiated into hygienic precautions and agricultural methods, the available farms were shown to them. As much as possible, each man was allowed to choose the situation which suited him best. These lands were new farms, arranged by the mission, which had been taken over from the *Companie foncière agricole et pastorale* or bought from various foreigners.

Each colonist settled on a farm received help as completa possible — a brick house or a collapsible dwelling with various outhouses, furniture, kitchen utensils, an assortment of implements, seeds and plants, some fruit-trees, goats, sheep and poultry.

The most important help given was the complete clearing of a certain number of hectares of land and the sanitation or drainage of the farm, works accomplished by means of numerous bands of native labourers who at this time cost from two to three francs a day. These works were therefore costly and a colonist could not have paid for them. Considerable expenditure was also entailed by the cost of colonists' food, for they had to be maintained at the State's expense until the yield of their harvests had ensured their livelihood.

At the same time as the agricultural mission was working at clearing land for the settlement of colonists it had to organize a technical agricultural department, experimental farms and breeding stations in other parts of Katanga.

Altogether the agricultural work executed in Katanga in 1911 and 1912 aimed at causing this province to pass in two or three years, as regarded agricultural progress, through all the stages on which other parts of the colony had spent twenty years. The agricultural experiments of the

independent State and the Belgian State had multiplied meteorological and agricultural research and crops and plantations in Lower and Upper Congo. The agricultural budget of these latter regions only, covered more than 3,000,000 francs a year. Moreover they were supplied with a large number of State posts and excellent means of railway and river communication, and enjoyed a more fertile soil, a more favourable climate, and a less costly and comparatively abundant labour supply. In Katanga, on the other hand, there was a complete void, and nothing serious in the way of agriculture had been done when the copper mines were first opened and the building of Elisabethville began. The conditions which agriculture would have to face were unknown. There was no means of communication. The mining district, properly so called, was known to be a desert country of poor soil, annually desolated by famine, where the bush hid, throughout the greater part of the colony, numerous unknown wild beasts. The native population was non-existent or nearly so. There was no live stock, no means of transport. The tse-tse fly was said to be particularly prevalent and to exclude all possibility of stock keeping.

The introduction of agriculture therefore necessitated a simultaneous study of natural conditions and economic factors. It was necessary to discover what methods of cultivation and stock farming must be followed in order to obtain the best results from the soil, and this was possible only by means of methodical experiments directed by an agricultural staff composed of experts in agriculture, farmers and veterinary surgeons.

The settling of the colonists gave rise to special problems. It was necessary first to persuade some energetic Belgians having a knowledge of agriculture to settle in this distant country. It was necessary to procure for them land, material and every kind of indispensable help. It was necessary also to take minute precautions to safeguard them against the illnesses frequent in a country so recently occupied Finally, the sale of their produce had to be considered for it could be taken for granted that the first colonists would be almost without capital.

All these problems were so closely and constantly related to agricultural questions that they could be solved only by agricultural experts. The necessity for a technical department became moreover clearer every year. The few valleys of more pronounced fertility in which the first farms were established yielded good harvests in the first year but were rapidly exhausted. A large number of the colonists had, in spite of all the certificates issued by competent persons in Belgium, more goodwill than practical knowledge of agriculture. The marked variations of temperature in the dry season and the abundance of rain in the wet season made cultivation more difficult than had been hoped. The pastures of Kundelungus and the Bianos, which earlier publications had described as very rich, were proved, on the contrary, to have a poverty of soil and vegetation which threatened the very existence of the live stock at certain times of year. Patient and methodical research was necessary to overcome these difficulties, which did not after all seem more insurmountable than those which had been encountered in other countries.

An experimental farm, situated on the Munama and connected with the town by 14 kilometres of road, was therefore established; as well as a laboratory for the chemical and physiological analysis of soils and for preliminary experiments in the use of chemical manures; a very complete meteorological station, the best equipped in the whole Congo; nurseries to enable the discovery of the trees which grew most rapidly and yielded timber both lighter and better suited to ordinary use than the native wood of Katanga Forest; plantations of fruit trees and ornamental trees; and a workshop fully equipped with implements for the repair of machinery.

The Agricultural Department of Katanga had also to take over the experimental farms and stockfarming stations begun by the special commission, and also, in the south of Kasai which had recently been annexed to the province, by the State. The number of farming and breeding stations was therefore very large at the end of 1912 and comprised many eventually closed or ceded to colonists. We should add to them the colonizing station of which we have already spoken, the farms of which about ten were being prepared for the settlement of colonists near Elisabethville and along the railway, the numerous works of drainage necessary to saving the colonists from fever, and the irrigation and many accessory works to which an enterprise of this kind necessarily gives rise.

The Agricultural Department of Katanga had also to manage an enterprise of general interest. The mission had formed a plan of irrigating its nurseries in order to get successfully through the six months of the dry season. But as typhoid fever was raging in the town the plant was extended and reinforced so that it could distribute water throughout the town. Finally the mission had to construct in Elisabethville itself a public market, a large number of dwellings, laboratories, workshops and stores for the housing of its staff and departments; and, for the extension of agriculture in subsequent years, it had to make 300 kilometres of farm roads which serve the farms round Elisabethville and make accessible to land-clearing machinery cultivable lands chosen by *La Pastorale*, and various farms already established by this company or individuals.

The Belgian colonists sent to Katanga at the State's expense in 1911-12 for the first experiment in colonization comprised twelve families or groups of associates, that is thirty-two adult men, nine women and nineteen children under fifteen. Other six families and six individuals, who had come to Katanga at their own expense, asked for help from the Department of Agriculture.

Altogether eighteen farms were occupied by these twenty-four families or individuals. There was wastage from the first: some colonists, vigorous and active though they were, became homesick and returned to their country soon after their arrival in Africa. Several others on the other hand showed themselves to have serious qualifications for their position; and the majority worked courageously in conditions which were unceasingly difficult and disquieting in spite of all the help the State gave. These Belgian colonists, who were almost without means or assured income, and were settled in the wildest and most exacting country of Africa, 10,000

kilometres away from their homes, needed much help and sympathy, all the more so because they opened up the road to their successors and because the future of agriculture largely depended on the success of this first attempt. This was unfortunately not always understood in Katanga, where almost everyone except the colonists enjoyed a secure and lucrative position.

From 1913 onwards, owing to circumstances to which we will refer later, no more Belgian colonists were sent to Katanga. New units were however added to them every year. There were artisans of Elisabethville who preferred a country to a town life or wished to have an amusement or an income supplementary to that which their habitual occupations afforded. There were colonists who had come out to farm but whom the high wages paid in mines had temporarily drawn into industry. There were foreign colonists, most of them South Africans, to whom the Agricultural Department did not fail to give advice and assistance. There were finally a certain number of dealers, trading in cereals and various grains, who bought farms rather as an additional than as a principal speculation. Only two or three colonists held important credit and could pay the greater part of their costs of installation

The list of the farming colonists has been frequently modified since 1913. Some have gone away for lack of energy, their efforts not having succeeded; others have gone because their health has been weakened by the influence of the climate, temperate though this is; a certain number because they had imagined that in Africa they would live in a country very like Europe and have been disillusioned; some because they could not become accustomed to separation from the relatives and friends whom they had had about them in their native country. On the other hand, several of these first colonists easily adapted themselves to the very special conditions of the African bush. Their success did not unfortunately prevent the rise of the very lively opposition which the agricultural colonization of Katanga encountered, from 1913 onwards, in Belgium as in the Congo

This opposition had a complex origin In part it was the result of the unfavourable attitude of some colonials to Belgian colonization over the whole extent of the colony. It was also a result of the discontent of some with the powers and credits accorded to the Agricultural Mission Finally it arose out of the impatience of the consumers, who had not been sufficiently informed as to the patriotic aim of the enterprise and who thought that the mission had no other object than that of lowering the price of food, and who were indignant because, in spite of the large government expenditure, provisions, vegetables, fruit, etc. were still scarce and very dear.

But the opposition also resulted from two faults of inexperience of which the Agricultural Mission was itself guilty. In the first place the mission had not been careful to keep the public posted as to its aim, its programme, the difficulties it encountered and the results it obtained or for which it hoped. In the second place it had, in order to encourage the first colonists, represented the enterprise as one which would rapidly bring about the establishment of a large number of farms and of Belgian colonists

in the region of Elisabethville, and this did not happen within the anticipated interval of time.

The unfavourable reports and rumours which came from Katanga with regard to the progress of colonization and the large expense it entailed received the more attention in 1912 because the colony was then going through a financial crisis, the formidable fall in the value of rubber and the State's abandonment of the rubber harvest having caused a deficit in the colonial treasury. Means for the reduction of expenditure were therefore sought, and the credit granted to colonization was the first item to be attacked and criticized. All that had been done by the mission and continued by the Agricultural Department was considered to be valueless; agriculture was deprived of its credits and staff; the plant and material collected with a view to colonization were appropriated to other uses or distributed among other departments; indifference with regard to the Belgian colonists was affirmed in a hundred ways. The roads the Agricultural Mission had used were neither completed nor maintained, so that the clearing machinery could not reach the land to be brought under cultivation. In spite of the petitions of the colonists this lack of maintenance and repairs affected even the roads indispensable to the farming of farms situated near the town which roads the Agricultural Department was no longer authorized to make itself. The public market intended for the sale of vegetables and agricultural produce was suppressed and its building turned into an office. No further interest was taken in the fate of the farmers, and State auctions were so organized that Belgian colonists could not participate in them and nearly lost their harvest. Without the affiliated British Mining Union, which showed the colonists more favour that the Belgians and concluded with them some important purchases, Belgian colonization would have disappeared.

Moreover a formidable competitor had been raised up to this colonization in 1915 by the encouragement given to natives from other districts to settle on the scarce fertile lands near Elisabethville which were to have been reserved for colonization. Numerous foreign natives, from Rhodesia and German East Africa, received on lease extensive lands on which they grew various crops.

In the two next years the situation was merely aggravated and the indifference to agriculture accentuated. Colonization went through a period all the more critical because the price of copper rose rapidly in consequence of the war and allowed the Mining Union to pay its employees not only high wages but also very considerable premiums. Since a good miner earns 35 francs a day several farmers entered this industry, and gave less work than before to their farms. Moreover the general attitude was very little favourable to the colonists, and several of them would have been ready to cede their farms to others if this had been allowed.

The future of agriculture seemed therefore very dark in 1917, and many despaired of Belgian colonization. But events have just taken a quite different course. In the very midst of the most critical period the cause

of colonization was making important although unsuspected progress, at first unperceived but now so manifest that its existence cannot be denied.

This progress is due in the first place to the very satisfactory results obtained from the experimental cultures practised in the last five years on the State farm, in the agriological laboratory of Elisabethville and in the breeding station of Katentania. It is also due to the initiative and persevering work of certain colonists. Finally it is due to the regret felt in all Belgian circles for the great diminution in the proportion of Belgian inhabitants in Katanga.

We will conclude by pausing for a moment on each of these three points :

1) *Results of Experimental Cultures and Breeding Experiments.* — Year by year methodical experiments in the maintenance of the soil's fertility, methods of clearing and cultivating land, and the keeping of domestic animals in the least favourable district, that is to say the country immediately round Elisabethville, have been organized. These experiments, which were carried out especially in Munama, have given results which are of extreme importance to Belgian colonization in Katanga. It has in fact been possible to attain in Munama to the complete conservation of the soil's fertility by a well understood succession of leguminous plants dug into the soil as green manures, and the use of other manures — chemical manures, wood ash, farm manure. By means of irrigation two harvests a year from the same land have been made possible, or crops have been insured against insufficient and irregular rains. A moderate work of deforestation has got rid of the tse-tse fly to an extent which allows not only yoke-animals but also milch-cows to be kept, the ground to be very economically ploughed by yoke-animals, and farm manure for the fertilization of the soil to be produced. Further, the best rotation of crops, the best intervals, and the best sowing seasons have been determined. Using these experiments as his guide, every colonist farmer who arrives in Katanga can at once begin the scientific farming of his farm, instead of working haphazard and meeting with many failures as the first colonists inevitably did.

Results are much more costly, slower and more difficult to reach in breeding than in tillage, for a harvest is obtained in the Congo in three or four months or half a year at most, while an animal does not reach maturity until it is three, four or five years old, according to its race and pasturage. Four or five times as much time as in tillage is therefore needed to make progress in breeding, and moreover the purchase of large herds costs hundreds of thousands of francs.

Research in Katentania has however yielded satisfactory results. It has already been remarked that animals born on the plateau seem to be more vigorous than those imported from Rhodesia from four to seven years ago, and that the crossed English bulls recently introduced are nearly twice as productive again as native bulls. Crossed calves are noticeably stronger and develop much faster than oxen of indigenous race. For that matter, these results could be foreseen, for they have been obtained in all the

countries of the world in which native cattle have been crossed with bulls of improved races.

As regards experiments in the cultivation of forage plants for feeding stock in the season in which natural grass is lacking, they have already yielded a first result: Japanese sugar-cane attains to exuberant growth in the valleys and even on the sides of the plateaux, and teff-grass gives large harvests of hay on the almost unmixed sand of the Bianos. These researches will be continued, and when the means of growing a leguminous crop on these pasturelands are found the problem will be largely solved.

2) *The Initiative and the Work of the Colonists.* — The colonists, both Belgian and foreign, generally had not at first much practical knowledge of agriculture, or they only understood agriculture in African countries much more favoured by nature than the south of Katanga. Their first efforts were therefore fairly rudimentary. But in the last three years they have made progress; especially the analyses of soils and the example of Munama have shown them how the production of the land can be maintained and increased. Thus the use of chemical and green manures allows large crops to be grown for sale and an abundance of forage to be produced. It has been proved in Munama that to defoiest the country around a farm a little is to get rid of the tse-tse fly, and to make possible the use of yoke-oxen, mules or donkeys and even the breeding of milch cows. Several colonists are already working on these principles. The yokes of donkeys, which are thus used in South Africa, have hitherto given complete satisfaction, as have the oxen and mules. The cost of plough is much less than that of hoe-tillage, and therefore the profit per hectare receives a notable increment, which is added to another, yet larger, obtained by the use of manures.

The colonists do not confine themselves to improving their crops: some of them, seeing the results obtained in Munama, have embarked on dairy production. One has successfully undertaken poultry-farming on a large scale. Not only do the colonists evince initiative and progress, but a growing interest in agriculture, market gardening and aviculture is found in the population at large, so that many people undertake a larger or smaller farm side by side with their ordinary occupations.

3) *New Consideration for Belgian Colonization.* — The war which brought together under the colours all the youth and courage of the nation made the recruiting of experts and engineers for Katanga difficult. The Mining Union and the railway had to turn to the south, and the proportion of Belgians fell very low. Industrial colonization, and incidentally agricultural colonization, of which even the memory seemed about to disappear, became the objects of a new attentiveness. There is a return to the conceptions of King Leopold II and the ideas which were the motive for sending out the Agricultural Mission, and one may hope that the period of doubt and depression is very near its end.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

CANADA

1 THE DISTRIBUTION OF AGRICULTURAL LABOUR — *The Agricultural Gazette of Canada*, Ottawa, September 1918

The Department of Agriculture instituted in the beginning of March 1918 a campaign aimed at securing a sufficient labour supply for the farmers. In Nova Scotia this campaign was entrusted almost entirely to the care of the Department of Industries and Immigration which sent to all the farmers in the province an application form which they had to fill up in order to obtain help. On this form there were questions as to the kind of work and the wages offered, the farmer's religious profession and the lodgings provided for labourers. A card was also sent to all the householders of the province and had to be filled up by all the members of households who were ready to work on their farms. The date on which they would be ready to work, the length of time for which they would be able to do so, the extent of their experience and their age were asked. All these forms and cards went, when filled up, to the Department of Industries and Immigration, and the officials, being in possession of this information, could make co-ordinated efforts and could hire directly all who wished to work on farms with the farmers. The two thousand school boys of the province who had registered themselves for farm work were enrolled as " soldiers of the soil ", and such of them as were not needed near their homes were placed elsewhere. By these means it was possible to distribute where labour was scarce the surplus labour supply which existed in certain other places.

In the province of Quebec the Minister of Agriculture has formed an organization of labour which consists of a central office extending its activity to each of 800 local agricultural committees in the province and to various sectional offices for recruiting labourers and soldiers of the soil. The provincial employment bureaux of Quebec, Montreal and Sherbrooke co-operate with the Department of Agriculture and their methodical recruiting has supplied a large number of competent or at least capable labourers to the farmers whom military conscription has deprived of their usual help. In obedience to the instructions of the central office each secretary of a local committee enters on the proper cards each farmer's demand for labour, and on corresponding cards the labourers' demands for employment. The requests for help presented to the committees have been estimated as numbering more than 6,000 but the scarcity of available labour has allowed statistics

to be drawn up with regard to only about 35 per cent. of them. On the 1st and 15th of each month the secretaries of committees transmit unsatisfied requests to the central office, which itself places some hundreds of labourers every month. The railway companies have granted reduced fares to agricultural labourers working within the province who present a certificate supplied by the official directors of agricultural labour. A particular effort has been made to place with farmers lads from fifteen to nineteen years old who are able to do valuable work, and the labour office has given instructions to this effect to the parochial committees, while the Young Men's Christian Association has epecially undertaken the recruiting of "soldiers of the soil" in the English-speaking teaching institutions, and their placing by means of its district represenstives. We should add that in order to encourage the "soldiers of the soil" movement the Catholic and Protestant sections of the Department of Instruction have recommended an extension of holidays which would allow schoolchildren to work in the fields. The local committees collected 700 offers to do work and the Young Men's Christian Association 800. The representatives of the latter placed 378 "soldiers of the soil", and the local committees and central office brought about the engagement of 589 of them on their fathers' or other farms.

In Manitoba about 10,000 men of the East and South were needed to help to bring in the harvests, and the fear of not finding this number caused the Department of Agriculture to organize with a view to utilizing the work of all men in the province who could give some evenings to the harvest. In all districts "harvest clubs" were formed, and in these the male population of towns and villages was enrolled. Since most commercial houses shut at four or five in the afternoon the men could give two or three hours' work. The farmer pays for this work at a fixed rate of 40 cents an hour and about a dollar a day for transporting the men. In all the large towns the clubs are divided into shifts of from ten to twenty men which are placed under foremen.

In Saskatchewan the department maintains four permanent district employment offices at Regina, Moosejaw, Saskatoon and Swift Current. Their speciality is the distribution of agricultural labour. They keep in touch with the floating labour supply, so as to place it in bush camps, mines, etc. in winter and bring it back to the farms in spring. Moreover they do not limit themselves to supplying the labour necessary to the harvest and threshing. They have also organized two hundred local labour committees in all the towns and villages of the province. These committees receive farmers' requests for help and transmit them to the district offices. An attempt is made by an active campaign to give all possible encouragement to the local populations to work on neighbouring farms for a week or two in spring or autumn. In the most important towns the local committees have a women's section.

Finally, in Alberta the organization for the distribution of labour consists of a central office which is a branch of the Department of Agriculture and of four local offices. In the spring recruiting agents were employed in the

States of Washington, North Dakota, South Dakota and Minnesota, and in the course of one month beginning on 1 March 1918 three thousand workers were placed. These offices are still at work and the number of workers which had been placed on 15 July 1918 was 5,115.

2. LAND SETTLEMENT IN BRITISH COLUMBIA — *The Agricultural Gazette of Canada*, Ottawa, September 1918

By the terms of the Act to Increase Production the Department of Agriculture formed in 1917 a Land Settlement Board which replaced the Agricultural Credit Commission constituted under the Agricultural Act, 1915. In virtue of the Land Settlement, and Development Act, 1918, the powers of this board have been enlarged. If Crown lands are left uncultivated the board can from time to time, with the approval of the lieutenant-governor-in-council, set aside a land settlement zone of specified area in any part of the province. In such areas the board may by agreement, or at a valuation giving notice, take possession of land in individual ownership, settle it and establish farmers on it, unless the existing farmers themselves undertake its improvement and cultivation. Two of these areas have already been established, one which measures 35,000 acres in the neighbourhood of Vanderhoof and another of 13,500 acres near Telkwa.

The board also makes loans to farmers to enable improvements. On 31 December 1917 it had made 490 such loans for the total sum of $941,950. Its credit business in 1917 can be resumed as follows:

	No. of applications	Sum applied for	Sum granted
	—	$	$
Applications granted	149	260,600	222,450
Applications refused	208	322,411	
Applications in suspense	55	120,700	
Total	412	703,711	222,450

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3. A COLLECTIVE LABOUR CONTRACT FOR THE EMPLOYEES OF ELEVATORS. — *La Gazette du travail* Ottawa, December 1918

A dispute having recently arisen among various owners of elevators in Port Arthur and Fort William and their employees who are members of Local No. 934 of the International Longshoremen's Association, an agreement, of which we give the chief clauses, was signed on 28 November 1918:

" 1. (a) The hours of labour shall be 10 hours per day for each and every recognized working day, from 7.00 a. m. till 6.00 p. m, with one hour for dinner from 12.00 noon to 1.00 p.m., from the opening of navigation till December 31.

" (b) From January 1 to be opening of navigation the hours of labour shall be eight hours per day for each and every recognized working day, from 8 a.m. till 5.00 p.m., with one hour for dinner from 12.00 noon to 1.00 p.m., except that hourly men employed in private non-storage inland cleaning elevators may enter into an agreement with their employer for not less than two weeks, to work one or two hours' overtime, up to 10 hours on week days only, at hourly rates ; otherwise, they will be paid overtime rates for overtime worked as provided in this agreement.

" (c) The rate of pay shall be fifty (50) cents per hour.

" (d) Where it becomes necessary to run a night gang, 10 hours shall constitute a night's work, from 7.00 p.m. till 6.00 a.m., with one hour for supper from 12.00 midnight till 1.00 a.m., at the rate of fifty-three (53) cents per hour.

" 2. (a) Except in cases of emergency, for all monthly men the hours of labour shall be 10 hours per day for each and every recognized working day, the hours to conform with those of the hourly men.

" (b) All monthly men receiving $105.00 or less per month prior to September 1, 1918, shall receive $120.00 per month, and all monthly men receiving $115.00 and over $105.00 per month, prior to such date, shall receive $130.00 per month, and all monthly men receiving $125.00 and over $115.00 per month, prior to such date shall receive $140.00 per month.

" (c) No employee who, at the time these rules take effect, is in receipt of a larger wage than as provided in the preceding sub-paragraph (b) shall be reduced because of this clause.

" 3. All hourly men working overtime shall be paid at the rate of time and one half up to midnight and double time after, and all hourly men working in the night gang shall be paid time and one half for all time worked after 6.00 a.m. and up to 12.00 noon, and double time after.

" 4. There shall be no extra or overtime allowed to monthly men unless otherwise agreed, but they shall be entitled to two weeks' holidays in the year with full pay, or two weeks' extra pay instead of such holidays ; such holidays to be taken at a time to be mutually agreed upon or at a time fixed by the employer, giving the employee two weeks' notice in advance.

" 5. Hourly men working on Sundays and legal holidays as hereinafter defined shall receive time and a half, except when entitled to double time as provided in paragraph 3.

" 6. Where night men in any particular case desire to work till 7.00 a.m. while waiting for street car, they may, with the consent of the employer, do so at straight time for the hour from 6.00 to 7.00 a.m.

" 7. (a) When the operating staff is reduced for any cause the reduction shall be made according to juniority of service, beginning with the junior employee, with due regard to competence.

" (b) When the staff is increased the employee or employees so laid off

shall be re-employed according to seniority of service beginning with the senior men, with due regard to competence.

" (c) Employees laid off upon reduction of staff shall leave their addresses with the superintendent of the elevator and the superintendent shall give them three days' notice in writing when to return to work. Any employee not leaving his address or not presenting himself within that period shall forfeit his rights. In case of emergency the three days' notice may be dispensed with. Any dispute growing out of the application of sub-classes (a), (b) and (c) of this section shall be adjusted under the provisions of Article 11.

" 8. All men shall be paid twice a month.

" 9. In hiring and discharging men there shall be no discrimination between union and non-union men, or for any other cause ".

The next article determines legal holidays. Article 11 stipulates that if a dispute arise between an employee and his foreman or the superintendent, the employee will have the right to an enquiry before the superintendent and may have the assistance of another employee of the same elevator whom he chooses himself. If a satisfactory settlement of the difficulty be not thus reached the dispute will immediately be subjected to arbitration. For the purposes of this arbitration the employer and the employee must each of them, within five days, choose a representative and these two representatives will agree as to the choice of a third arbiter. The three men thus chosen will constitute an arbitrating committee, and the decision of two of them will be final and binding on both parties. If the employee have been dismissed or suspended and the committee decide that he should be reinstalled, he will have the right to his wages for the time lost; but a dismissed or suspended employee may not in any case continue to work in the elevator until the arbitrating committee has given its decision.

This agreement came into force on 1 November 1918 and is applicable until 31 August 1919, after which date it is renewable from year to year by tacit prolongation unless one of the parties desire to terminate it, giving thirty days' notice. If the parties then fail to agree as to the terms of a new contract they will submit their difference to a committee of reconciliation nominated by the Minister of Labour.

FRANCE.

THE AGRICULTURAL RECONSTRUCTION OF THE LIBERATED DISTRICTS — Reports of the sessions of the Senate: session of 3 December 1918

In the session of the Senate held on 3 December 1918 M. Lebrun, the minister, gave the following information as to agricultural reconstruction in the liberated districts.

Agricultural reconstruction in the northern and eastern districts

affects more than 2,000,000 hectares, of which 1,500,000 hectares are arable land producing before the war 18,000,000 quintals of corn and carrying live and other stock worth more than 2,000,000,000 francs, at a pre-war valuation. A knowledge of the lamentable state into which much of this land has fallen enables the immensity of the required effort to be measured.

The means of action, which were very limited while the activity of the nation was concentrated on the war, are increasing, because the armies which are at rest in these districts place all their resources in men, horses, and above all material, at the disposal of agriculture, because men are returning to these districts as a consequence of demobilization, and because a large number of factories which have been engrossed by war work can now give themselves up to the manufacture of agricultural implements and thus supply necessary material.

The following few words explain the method adopted.

The engineers of the land improvement department, aided by the farmers, first classify the lands in various categories in accordance with the damage they have suffered. A first category comprises lands which have suffered only slight damage, some shell-holes for example, and which can be restored to cultivation after some fairly restricted levelling. In a second category are the lands which are scored by trenches and networks of barbed wire, and which require considerable work before they can be brought back to a normal state. A third category comprises other and much damaged land, which can be brought back to cultivation only after a somewhat long period, and which will doubtless be turned into grassland or woodland.

Land in the first of these categories is brought back to cultivation by the farmers as they gradually return. Where lodging or means of livelihood are inadequate the work is done by companies of prisoners affected to the Ministry of Agriculture.

As regards land in the second category, the filling up of trenches and other work, for which the Ministry of War provides, have been for some months in the hands of agricultural engineers, who have drawn up a scheme for bringing the land back into a good state. This plan will be executed, more or less rapidly as available resources allow.

In order to ensure a supply of these resources, Parliament in August 1917 passed a law instituting an Office of Agricultural Reconstruction. Its administrative council includes eight important farmers of the northern districts, all excellent practical farmers, and also representatives of the ministerial departments concerned. This office is the adviser of the Minister of Agricultural Reconstruction; and is responsible for making purchases of material, stud and milking stock, seeds, plants and manures, and for distributing these purchases by ceding them to the various persons who have suffered losses. From the time it was constituted, in October 1917, this office has been at work: the experts in agriculture and in building for farms through whom it works have drawn up a table showing the general demand for live stock, ploughs, harrows, rollers, haymaking and

reaping machines, etc. Since January 1918 collective orders have been made. Their execution has not indeed gone very far because in every factory labour and primary material have been absorbed by the war. But the factories are now asking for orders and offering to execute them.

We should add that in all the liberated districts there is a certain amount of material which can be recovered. It passes through repairing workshops and is then placed at the service of the armies who apply for it for local work or ceded to persons who have suffered losses.

Such is the general organization of this work. But the legislators have thought it might be too far removed from the persons who have suffered loss, and one clause of the law therefore indicates that it would be well to have intermediaries between them and the office. These intermediaries are societies, holding a mandate, and composed of freely associated farmers of the liberated districts whose sphere of work is the department. These societies, who have a complete knowledge of the needs of the persons who have incurred loss and who estimate and add up these needs, receive from the office a certain quantity of goods — material and implements acquired by means of the general markets already mentioned — and they distribute these, or else they themselves, in the case of goods which cannot be procured much in advance, make purchases, afterwards distributing what they buy.

We should add that an agricultural co-operative societies' mission helps the farmers to group themselves. They are obliged to form groups, first because at the outset they dispose od a small supply of horses, other live stock, material and implements of labour, and must make use of these resources co-operatively; and often also because in many districts the boundaries between properties have disappeared and co-operative farming is therefore necessary. In the spring of 1918, 120 co-operative societies were already constituted and had brought 40,000 hectares of land back to cultivation.

GREAT BRITAIN AND IRELAND

THE LAND DRAINAGE ACT, 1918. — *The Journal of the Board of Agriculture*, vol. XXV, No. 8, London, November 1918.

A. *The Necessity for the Act.*

It is estimated that about a million acres of land in England and Wales might be made arable or increased in value as grass land by arterial drainage. Energetic landowners and tenants have done what they could to prevent floods and to drain agricultural land more efficiently; but the inertia of their neighbours, whose collaboration it has been impossible to secure, has neutralized their efforts. Action has been particularly difficult in the case of land occupied or owned by a considerable number of persons.

In many places Commissions of Sewers have been established for

centuries ; in others drainage authorities have been set up under local Acts ; and a number of Drainage Boards have been constituted under the Land Drainage Act of 1861. The total area thus affected is however small compared with the total area of floodable and waterlogged land capable of improvement in the country.

There have been three main obstacles to the usefulness of the drainage authorities. In the first place the activity of each authority has extended only over an isolated area : there has, for instance, been no provision for co-ordination between the drainage authorities competent within the limits of one river basin. In the second place the procedure for setting up Drainage Boards has involved possibilities of failure. Before the Board of Agriculture and Fisheries could set up such a board in any area a petition must have been received from the owners of no less than one tenth of the acreage which would be affected. All initiative could therefore be prevented by the apathy of landowners. Further, after the Board of Agriculture and Fisheries had drafted a provisional order constituting a Drainage Board, no further step could be taken without the consent of two thirds of the landowners, and such consent has frequently been difficult or expensive to obtain. And, finally, the Act of 1861 required that an order setting up a Drainage Board should remain ineffective until it had been confirmed by Parliament. The third obstacle to sufficient drainage has been the difficulty of financing it.

B. *The Provisions of the Act.*

1) *The constitution of the drainage authority.* — The Land Drainage Act, 1918, has considerably modified the procedure for causing a drainage authority to be established. The term "drainage authority" is stated to apply to Commissions of Sewers, Drainage Boards, and any body of persons authorized by a local Act or award to make or maintain works for the drainage of agricultural land.

A draft order constituting a separate drainage district may now be framed by the Board of Agriculture and Fisheries not only on receipt, as before, of a petition from the owners of one tenth of the area which it is proposed to drain, but also on receipt of a petition from the council of the county or county borough in which this land is situated. Further the Board may now itself initiate proceedings for such an order. Due notice of it is given, and any objections to it are considered, a local enquiry being held if necessary. The Board may afterwards make the order definite unless one third of the owners affected object to it. After it has been made definite thirty days' notice must be given, and if within these thirty days a memorial against it be presented to the Board it requires the confirmation of Parliament before it becomes effective. Failing the presentation of such memorial it has force from the time when the thirty days lapse.

Any drainage authority can arrange with a similar authority in an area adjoining its own for the execution of works in this adjoining area on such terms of agreement or otherwise as may be decided.

In certain conditions drainage and navigation authorities may agree together for the execution of necessary drainage works, and for the transference to the drainage authority of the whole or any part of the undertaking of the navigation authority. This power may be of value where obsolete navigation works are an obstacle to effective drainage.

Every drainage authority must annually send to the Board of Agriculture and Fisheries, before a date fixed by this Board, a report, drawn up according to a prescribed form, of its proceedings in the previous year.

2) *Provisions for the supersession of a drainage authority.* — The new Act provides for cases in which effective drainage is not secured by the drainage authorities, owing to their incompetence or for other reasons.

In the first place the council of a county or a county borough may petition for and obtain the transference to itself of the powers, duties, property and obligations of the drainage authorities competent within its sphere. Where a drainage area lies within the jurisdiction of two or more councils these may form a joint committee to which the competence of the drainage authority concerned may be transferred.

In the second place certain powers are vested in the Board of Agriculture and Fisheries.

Under the Sewers Act, 1833, the Court of Sewers might appoint an officer to execute needful repairs of works effecting drainage which had been neglected by the person or body liable for their maintenance, and to recover the expenses thus incurred from such person or body. This power of the Court of Sewers has been transferred to the Board of Agriculture.

Further, the Board of Agriculture may exercise drainage powers conferred by any general or local Act, any order or award or any Commission of Sewers, if these powers are left abeyant or exercised insufficiently. In this way the Board can supersede any drainage authority which fails to maintain efficient drainage, carry out necessary work in the place of such authority, and recover its expenses by exercising the powers of such authority. It can also enforce the provisions as to drainage in Inclosure Awards.

3) *Provisions for extending drainage areas.* — The weakness of the earlier system, that it provided for no general scheme of drainage, has been partly remedied by the provisions, already mentioned, for the co-ordinated action of drainage authorities in adjacent areas and of drainage and navigation authorities. The new Act further provides that drainage authorities may execute works outside their areas, following the procedure established by the Land Drainage Acts of 1847 and 1861 to enable persons interested in land to secure outfalls for their drains.

The extension or the alteration of the boundaries of any drainage area may be petitioned for by the drainage authority concerned or others, the procedure being that followed when a petition is made for the constitution of a drainage district. The drainage authority concerned must give its consent to such extension or alteration.

The limits of the jurisdiction of a Commission of Sewers may be defined by the Board of Agriculture on the petition of the commission.

When the Board of Agriculture is of opinion that an area of land, which

cannot be conveniently drained under other provisions of the Act, is capable of improvement by drainage, and that the expense of executing and maintaining drainage will not exceed the increase it will bring to the land's value, the Board may draft a scheme showing the area to be improved, the proposed works, the estimated cost of executing them, the maximum sum recoverable by the Board in respect of them, which sum must not exceed £5 an acre or £5,000 in all, and the manner in which the expenses of executing and maintaining the works are to be apportioned among the lands in the area. The draft scheme must be deposited for inspection, and notice of it must be given to owners and occupiers of land within the area in question, and to other persons and bodies interested. These may lodge objections to the scheme and their objection will be considered before it is made definite. In order to execute and maintain the works involved the Board will have all the powers of a Drainage Board within the area concerned; and the expenses of execution and maintenance, up to the aforesaid maximum, are summarily recoverable by the Board, provided that an owner be allowed, if he desire, to make the payments due from him by instalments.

The Board of Agriculture may delegate all its powers under the Act to take direct action as a drainage authority to duly constituted bodies.

4) *The financing of drainage.* — In an order establishing a drainage authority come into force, the expenses of obtaining it are made a first charge on the rates of the district the order constitutes. If the petitioners for an order do not obtain it they must pay the expenses they incur.

In many cases a drainage authority has been hampered in the execution of necessary works by a limit on rates inconsistent with modern conditions or by some other disabling or inadequate provision. The Act therefore empowers the Board of Agriculture to confer upon a drainage authority, if the interests of effective drainage so require, additional powers of levying rates and borrowing, and of altering or supplementing the provisions of any local Act or award from which its powers are derived. A petition for the order conferring such new powers may be presented either by the drainage authority itself or by the council of the county or county borough in which the area in question is situated

Another section of the Act removes any doubt as to the power of a Commission of Sewers or a Drainage Board constituted under the Land Drainage Acts to levy rates on the basis of acreage, and renders valid rates levied on that basis either before or after the passage of the new Act. Rating on the basis of annual value is not however forbidden. An order may be made which allows differential rating within a drainage area, or the total or partial exemption from liability to pay rates of buildings, railways, canals, inland navigation property or any other special class of property.

With the concurrence of the Local Goverment Board local authorities may contribute to the expenses of drainage which is desirable in the interests of public health or for the protection or better enjoyment of highways.

Owners of land in a drainage area, who have power to invest money on real security, may invest on the security of a first mortgage of the drainage rates which can be levied in the area.

URUGUAY

SOME DATA AS TO AGRICULTURAL CONDITIONS IN URUGUAY IN 1917. — *República Oriental del Uruguay. Ministerio de Industrias. Oficina de Estadística.* Statistical Map published by the Office of Agricultural Statistics of Uruguay. Imprenta Nacional. Montevideo, January 1918.

From a statistical map published by the Office of Agricultural Statistics at the Ministry of Industry of Uruguay, we obtain distinct information. distributed among provinces, as to the conditions in this country with regard to the various branches of agriculture and the agricultural population:

We will resume these data in due order.

TABLE I. — *Area of Stock and Arable Farms.*

Departments	Total area hectares	Area occupied by stock and arable farms hectares	Percent.
Tacuarembó	2,102,249	1,516,573	72.1
Cerro Largo	1,490,441	1,286,845	86.3
Durazno	1,431,489	1,071,934	74.8
Paysandú	1,325,234	1,314,031	99.1
Salto	1,260,161	1,255,669	99.6
Minas	1,249,822	877,074	70.1
Florida	1,210,715	902,212	74 5
Artigas	1,137,952	1,097,418	96.4
Rocha	1,108,888	1,015,769	91.8
Rivera	982,094	904,266	92.0
Treinta y Tres	955,035	830,756	86.9
Soriano	922,351	881,152	95.5
Rio Negro	847,088	827,052	97.6
San José	696,207	480,091	68.9
Colonia	568,168	555,708	97 8
Canelones	475,195	273.013	78.4
Flores	451,936	442,015	97.5
Maldonado	410,557	404,875	98.6
Montevideo	66,409	42,561	64.8

It follows from Table I that the departments having the largest area occupied by stock and arable farms are those of Salto, Paysandú, Colonia, Rio Negro, Flores, Soriano and Maldonado, that is to say those which cover the western part of the republic, Maldonado alone lying in the extreme south-east.

In these departments the cultivated area covers more than 90 per cent. of the total area ; in the others it covers at least 70 per cent thereof, except in San José and Montevideo where the percentage of cultivated land is 68 and 74, respectively.

TABLE II. — *Stock and Arable Farms.*

Departments	Stock farms		Arable farms		Mixed farms	
	Number	Area hectares	Number	Area hectares	Number	Area hectares
Tacuarembó	1,300	1,255,518	948	33,967	676	227,088
Cerro Largo	881	745,324	1,226	63,216	1,626	478,305
Durazno	1,136	829,840	502	13,503	980	228,591
Paysandú	553	1,170,981	919	24,129	317	108,921
Salto	862	1,057,706	541	18,627	399	179,316
Minas	1,406	504,403	1,989	86,927	1,564	285,744
Florida	1,300	588,702	1,660	74,891	942	238,619
Artigas	603	996,403	615	12,591	215	88,424
Rocha	877	502,503	639	34,644	2,201	481,622
Rivera	823	628,654	920	26,796	700	248,836
Treinta y Tres	942	581,067	469	14,201	713	235,488
Soriano	842	564,720	774	102,263	502	214,169
Rio Negro	522	697,407	118	9,989	193	119,656
San Jose	573	328,956	2,230	128,525	876	122,610
Colonia	655	165,351	1,470	125,714	1,423	264,643
Canelones	319	50,658	8,049	236,697	935	85,655
Flores	427	319,471	302	12,967	326	109,577
Maldonado	1,155	225,474	910	38,267	1,121	141,134
Montevideo	85	5,874	2,244	27,300	483	9,387

TABLE III. — *Rural Population.*

Departments	Landowners	Lessees	Métayers	Total
Tacuarembó	1,861	871	192	2,924
Cerro Largo	2,454	782	497	3,733
Durazno	1,507	882	229	1,618
Paysandú	1,068	554	167	1,789
Salto	1,178	470	154	1,802
Minas	2,798	1,681	470	4,949
Florida	2,202	1,334	366	3,902
Artigas	860	359	214	1,433
Rocha	2,743	749	225	3,717
Rivera	1,515	632	296	2,443
Treinta y Tres	1,409	516	199	2,124
Soriano	1,110	788	220	2,118
Rio Negro	489	307	27	823
San José	1,398	1,938	343	3,679
Colonia	1,916	1,361	277	3,554
Canelones	3,747	4,949	607	9,303
Flores	564	371	120	1,055
Maldonado	2,350	574	262	3,186
Montevideo	1,352	1,272	188	2,812

Altogether it may be stated that in Uruguay the cultivated land represents about 80 per cent. of the total area which is, as is known, 186,926 square kilometres or 18,926 600 hectares.

From Table II we learn that the departments having the largest number of stock farms are those of the centre, namely Tacuarembó, Durazno, Salto, Treinta y Tres, Río Negro, Soriano and Flores; while the departments in which arable farms prevail are those bordering the estuary of the Plata, namely Paysandú, Minas, Florida, San José, Colonia, Canelones, Montevideo, these latter departments absorbing, as we shall see, the greater part of the rural population.

The statistical map which is our guide gives the number and status of the rural population as appears in Table III.

We can therefore say that the stable rural population of Uruguay includes about 60,000 farmers, who represent altogether, landowners, lessees and métayers included, about 4.3 per cent. of the total population, this being 1,378,808 according to the most recent data. Of this rural population about 23 per cent. is foreign as appears from Table IV.

TABLE IV — *Percentage of Rural Population.*

Departments	Natives	Percentage	Foreigners	Percentage
Tacuarembo	2,189	74 8	735	25 2
Cerro Largo	2,770	74.2	963	25.8
Durazno	2,249	85.8	369	14.2
Paysandú	1,061	59.3	728	40 7
Salto	1,130	62.7	672	37.3
Minas	4,385	86.6	564	11 4
Florida	3,156	88.8	746	11.2
Artigas	811	56.5	622	43.5
Rocha	3,272	88 0	445	12.0
Rivera	1,644	67.2	799	32 8
Treinta y Tres	1,822	85.7	302	14 3
Soriano	1,580	74 5	538	25.5
Rio Negro	628	76 3	195	23 7
San Jose	2,788	75.7	891	24 3
Colonia	2,420	68.4	1,134	31.6
Canelones	7,123	76.6	2,190	23.4
Flores	886	83.9	169	16.1
Maldonado	2,902	91.0	284	11.0
Montevideo	1,431	50.8	1,381	49.2

It is worthy of notice that the departments in which the foreign rural population supplied by immigration prevails are not those on the Atlantic seabord, although these are nearest Montevideo, the landing centre, but are the departements of Artigas, Salto and Paysandú, which are precisely in the extreme northwest of the republic. Nor is this contradicted by the fact

that the rural foreign population forms 49.2 per cent. of the whole population of the department of Montevideo, for, as we have already said. the department may be considered to constitute a necessary halt on the road of immigration.

The statistical map to which we have referred gives us finally data as to the total production of stock and arable farming in Uruguay in 1917. Arable farming produced 146,697,972 kilogrammes of wheat; 173,109,435 kilogrammes of maize; 3,096,768 kilogrammes of flax; 27,959,463 kilogrammes of oats; 2,401,695 kilogrammes of barley; and 2,905,740 kilogrammes of beetroot. Stock farming produced 7,802,442 head of cattle; 11,472,852 head of wool-bearing animals; 303,958 pigs; and 567,154 horses.

The departments producing most wheat are Maldonado, Canelones, Colonia, San José, Soriano, Florida and Minas; those producing most maize Minas, Florida, San José, Canelones, Maldonado; those producing most flax Soriano, Colonia, Canelones; those producing most barley Soriano, Rio Negro, Canelones. Sugar beetroot is grown only in Maldonado, 2,905,704 kilogrammes thereof having been produced there in 1917. The departments producing most stock are, as regards cattle, Tacuarembó, Cerro Largo and Durazno; as regards sheep, Durazno and Soriano; as regards pigs, Tacuarembó and Cerro Largo.

RUGGERI ALFREDO, gerente responsabile.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

Origin of the Institute and Summary of the International Treaty.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall:

(*a*) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets;

(*b*) communicate the above information as soon as possible to those interested;

(*c*) indicate the wages paid for farm work;

(*d*) record new diseases of plants which may appear in any part of the world, showhing the regions infected, the progress of the diseases, and, if possible, any effective remedies;

(*e*) study questions concerning agricultural co-operation, insurance, and credit from every point of view; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit;

(*f*) submit for the approval of the various governments, if necessary measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10*d.*	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	1*s.* 1 1/5*d.*	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	9 32/64*d.*	at par
1 Dollar, gold ($) (100 cents) (United States)	=	4*s.* 5/16*d.*	at par
1 Drachm, gold (100 lepta) (Greece)	=	9 33/64*d.*	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1*s.* 7 33/64*d.*	at par
1 Franc (100 centimes) (France)	=	9 33/64*d.*	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 32/64*d.*	at par
1 Len (100 statinki) (Bulgaria)	=	9 33/64*d.*	at par
1 Lira (100 centesimi, (Italy)	=	9 33/64*d.*	at par
1 Litre	=	0.21998	gallons
		0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4*d.*	at par
1 Mark (100 penni) (Finland)	=	9 33/64*d.*	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	2*s.* 2 61/64*d.*	at par
1 Milreis, gold (Portugal)	=	4*s.* 5 29/64*d.*	at par
1 Peseta, gold (100 centimos) (Spain)	=	9 33/64*d.*	at par
1 Peso, gold (100 centavos) (Argentina)	=	3*s.* 11 37/64*d.*	at par
1 Pound, Turkish, gold (100 piastres) (Ottoman Empire)	=	18*s.* 0 13/64*d.*	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	2*s.* 1 3/8*d.*	at par
1 Rupee, silver (16 annas) (British India)	=	1*s.* 6*d.*	at par
1 Talari (20 piastres) (Egypt)	=	4*s.* 1 11/32*d.*	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	2*s.* 0 37/64*d.*	at par
1 Zentner (Germany)	=	110.23171	lbs.

YEAR X — NUMBER 3 ROME, MARCH, 1919

INTERNATIONAL INSTITUTE OF AGRICULTURE
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INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

BELGIUM.

THE WORK OF THE "BOERENBOND" (PEASANTS' LEAGUE) IN 1917.

SOURCE:

BOERENBOND BELGE OU LIGUE DES PAYSANS. EXERCICE 1917 — RAPPORT SUCCINCTEMENT PRESENTÉ A L'ASSEMBLÉE GÉNÉRALE DU 20 MAI 1918 PAR LE CHANOINE LUYTGAERENS, SECRÉTAIRE GÉNÉRAL (*Belgian Boerenbond or Peasants League: Year 1917 — Brief Report presented to the General Meeting of 20 May 1918 by Canon Luytgaerens, General Secretary*). Louvain, 1918

§ 1. WORK OF A GENERAL CHARACTER.

Since the general state of affairs in Belgium had not been altered in 1917 the work of the *Boerenbond* was little different from that it had accomplished in previous years. It continued in 1917 to render services not only to its members but also to the whole population. It endeavoured to be useful on the occasion of requisitions of grain and of potato harvests; it examined the relations between consumers and producers and reminded the

(1) See the information we have given as to the *Boerenbond* in our issues for May 1917, page 1, and March 1918, page 202. We refer the reader who would have comprehensive information as to this league to the paper in our issue for November 1913

latter of the duties incumbent on them, it contributed to public victualling directly or indirectly and also took an interest in the solving of various special problems Its essential task remained however that of helping its members whenever an opportunity to do so presented itself.

The delivery of grain and potato harvests entailed numerous difficulties. As early as the autumn of 1916 and spring of 1917, before the sowing and planting season, the *Boerenbond* had insisted on the fact that farmers would limit their production of grain and potatoes if there were persistence in the course of requisitioning these products almost exclusively and if no thought were taken to modify the measures regulating requisitions or to encourage the cultivation of these two crops in a practical way. Grain and potato crops gave rise to difficulties for those who grew them and were also much less remunerative than many others. In order to guard as much as possible against the difficulties its members might encounter the *Boerenbond* supplied them with the information it was able to collect, and with precise indications as to the manner in which they should, if necessary, make effective complaints. Some details on this point are not without interest:

By the terms of a decree of 24 March 1917 farmers were bound to declare the area occupied by their various crops. By a circular of 20 April the Boerenbond communicated this measure to its members and exhorted them to make their declarations with all the exactness desired and carefully to keep copies of them.

A decree of 23 June determined the procedure for estimating harvests. There was to be no reference to the declarations of growers, but a delegate of the *Provincial Ernte Kommission* would fix for each commune an average which would serve as a basis for the calculation of the quantities to be delivered. A circular of the *Boerenbond*, dated 7 July, informed its members as to this decree, drawing their attention to the vexatious consequences it might have for farmers who had bad harvests, and advised that in their case the growing crop should be estimated, either by the local committee of harvests or by two trustworthy witnesses, such a precaution being indispensable if claims for over large quantities were not to be received later.

During September the farmers received from the *Provincial Ernte Kommission* the information card which communicated to them the manner in which disposal would be made of their harvests. They did not find stated on this card, as in previous years, the number of kilogrammes required of each of them. Out of the whole harvest they might retain only seed and the ration of each family or person. This regulation did not fail somewhat to disquiet the farmers each of them found himself obliged to deliver a certain quantity but no precise figure was fixed for this delivery, and several feared they would have to supply excessive quantities. The *Boerenbond* made enquiries, and in a circular of 12 October published the information it had collected. The quantities required were calculated on the following double basis — the average yield per commune, fixed by the delegates of the *Provincial Ernte Kommission*, and the cultivated area, noted by the representatives of the Belgian harvests offices ; and those interested would find the data of these two kinds in the communal building. It

goes without saying that in the case of many farmers neither of these bases could correspond with the truth. The circular explained what action was necessary in these cases, and a new circular of 8 November entered into the fullest details on this subject.

The necessary explanations as to the requisition of potatoes were given in a circular of 12 October. " The execution ", it stated, " of the various provisions is entrusted in each *arrondissement* to the civil commissary, who has caused the total area planted with potatoes and the average yield to be noted in every commune. Each commune has been notified as to the quantity thus noted as harvested within its territory, and as to the part of such quantity which may be retained for planting and for the rations of the inhabitants and the part which must be delivered. The quantity each farmer must supply is determined by the burgomeister or, if necessary, by the local harvests commission. Whoever finds a larger quantity required of him than that at his disposal must address himself first to the local harvests' commission or the burgomeister and secondly, if necessary, to the civil commissary. "

These instructions, together with the devoted co-operation of the administrators of gilds, were useful to a large number of the members of the *Boerenbond*. But many complaints still reached this league. Farmers, especially the smallest farmers, complained that property beyond the quantity of which they really disposed was requisitioned from them, or that they were compelled to pay in money fines, which were sometimes very high, because they had not satisfied the demands of requisitions or had delivered requisitioned goods after the prescribed date or otherwise broken a rule. The *Boerenbond* examined each of these cases individually as best it could, and echoed in high places such complaints as seemed to it justified.

Some grievances advanced by the agricultural class were not without reality. The flour ration left to the farmer had been reduced to 250 grammes while the rest of the population could hope for its increase, circumstances permitting, and while the industrial worker enjoyed a supplement. The farmer's potato ration was only 190 grammes ; nothing at all was left him for his live stock, although bran as offals of rations might be said to be completely lacking, the milling extraction having been fixed at 97 per cent.

Appeals with regard to the delivery of grain were received only up to 1 November, and the interval within which deliveries might be made did not end until 31 January and was eventually prolonged until 15 February.

From the oats harvest farmers were allowed to take only 1500 grammes a day for their horses and might retain nothing for their draught cattle ; and yet, owing to the lack of draught horses, cattle had to do most of the work. Their masters did not know where to find the food necessary to their sustenance.

Growers of rye only might not exchange it for wheat or flour.

It was of these measures that the farmers complained.

The *Boerenbond*, when asked to intervene, declared itself ready to support those who complained. In principle the complaints were well founded,

but it was necessary in considering them to make reserves. It was certainly desirable that the farmers should receive a larger food ration and that a certain quantity of grain and offals should be granted to them for their live stock, but only on condition that no prejudice was thus wrought to public victualling. It was necessary moreover that this double concession should, if it were made profit first of all the small holders who needed it most.

The *Boerenbond* wrote to the occupying authority to this effect ; and at the same time made its gilds understand that they should unite their efforts to its own if they wished the complaints to be looked upon as coming from the whole agricultural class and thus to have some hope of success. Some hundred gilds forwarded requests through the medium of the *Boerenbond* while others sent them directly.

Several meetings were also summoned, either by the care of the *Boerenbond* or on the initiative of those interested.

The efforts made were crowned with a partial success The farmers did not, it is true, obtain either a supplementary food ration or any allowance for their live stock ; but growers of rye were authorized to part with their rye ration at the rate of 33 francs for 100 kilogrammes and exchange it for the ordinary flour ration, paying the same prices as non-producers. Persons wishing to have oats for their draught cattle might apply to the heads of their respective *arrondissements*. The date 1 November was no longer taken into account, appeals being admitted after it was passed : this was officially decreed for Limbourg and put into practice everywhere else.

Another request of the farmers was favourably received ; for the price of requisitioned wheat was raised from 26 to 36 francs, that of rye from 24.50 to 33 francs, that of potatoes from 10 to 20 francs.

Not satisfied with giving all possible effect to each man's legitimate rights and claims and obtaining the best results possible from the system of requisitioning in force, the *Boerenbond* wished for more. It had several times over expressed a wish to see quite another system of requisitioning agricultural produce adopted. It was persuaded that it would be possible considerably to lessen the difficulties which had occurred and at the same time to strike a notable blow at fraudulent trade. Such trade had wrought untold evil to the population throughout the duration of the war, and was flourishing more than ever towards the end of the summer and especially when the potato harvest began. The *Boerenbond* decided to make an effort to remedy this situation and addressed proposals with regard to the grain and potato harvests of 1918 to the competent authorities. It first proposed that on the one hand the instructions as to the quantities to be supplied should be given to each farmer or at least to each commune before the sowing and planting seasons, and that on the other hand farmers might freely dispose of all their surplus. After two or three years' experience data existed sufficient to determine a total figure for the deliveries which each farmer or commune could and should make. The *Boerenbond* further proposed to assess each farmer not according to the number of hectares yield-

ing him grain or potatoes but in proportion to the total area of his farm, meadows and woods being deducted. Thus every farmer farming, for instance, 10 or 20 hectares of land would have to deliver 10 or 20 times a certain number of kilogrammes, and would be certain in good time as to the maximum quantity he would have to deliver, and could dispose freely of the surplus. In fixing amounts regard would be paid to the fertility of the land and the agricultural conditions in the various farming districts. To apply these measures would be to encourage farmers to increase their production of grain and potatoes, and would erect a barrier against fraud and usury, allowing the middle class to obtain provisions by legitimate means.

Another proposal, following on these, aimed at securing that market gardeners cultivating more than a certain number of ares should deliver a fixed quantity of vegetables per are and dispose of the surplus as they chose.

These proposals led to nothing before the autumn of 1917, but by a decree of 21 February 1918, appearing in the *Bulletin of Laws and Decrees* of 8 March the Governor General laid down the following rules :

" Seizure is made of barley and winter barley, oats, early and late potatoes, tobacco and chicory derived from the 1918 harvest...

" The quantity of each of the aforesaid products which must be delivered by each commune is determined by the authorities who receive a mandate for this purpose. Such determination will take into account on the one hand the cultivated area, and on the other hand a yield per hectare to be fixed in the case of each of these crops, and it will be so made that farmers will still be able to dispose freely of a part of their harvests. Thus the basis where potatoes, barley and oats are concerned will be the areas noted as cultivated in the Belgian statistics of 1910, but these areas will be diminished by 25 per cent. In the case of chicory the basis will be the area cultivated in 1916.

" Each commune will have the right to distribute the quantities it has to deliver among the farmers cultivating land within its territory...

" After having discharged the duty of making the compulsory deliveries farmers will have the right to dispose freely of their remaining produce, and to part with it, observing eventual regulations, by the method of free trading, " without being bound by the existence of official prices.

Thus it is seen that some of the measures for which the *Boerenbond* had asked were applied to the potato harvest.

At the beginning of the war the *Boerenbond* was able to contribute to the supplying of agriculture with concentrated foods and chemical manures. Thus a double object was attained : on the one hand yields were increased ; on the other the victualling of the population was indirectly assisted. In 1917 the *Boerenbond* was in this sphere reduced to almost absolute powerlessness. Manures obtained by trade were becoming rarer and rarer. The *Boerenbond* still disposed, it is true, of half the amount of sulphate of ammonia granted to Belgian agriculture ; but, faithful to its principles, it handed over the whole stock, namely 4,600 tons, to the

National Agricultural Section, which was bound by the rules of the German civil administration to distribute it proportionately throughout the country

It appears from what has been said that the *Boerenbond* has on every occasion made a point of contributing indirectly to the victualling of the population. We should add that it has even been able to co-operate in this enterprise directly, giving aid in determined circumstances to committees, communal stores, etc Because certain institutions, such as the popular soup-kitchens, were extended, they were obliged to make considerable purchases of vegetables, a very difficult matter in the circumstances. The Horticulturists' Federation of the *Boerenbond* placed itself at their disposal and undertook to conform in all respects to their instructions This collaboration could be very precisely regulated as soon as the vegetable trade became quite free. The occupied part of Belgium was divided into various districts in such wise that everyone knew where to procure the vegetables he needed or to get rid of any surplus of them he might possess At Louvain the district, which comprised nearly the whole *arrondissement*, was assigned to the Horticulturists' Federation as its field of action. An agreement was made between the co-operative society known as *L'alimentation dans la région de Louvain* and this federation for the acquisition of vegetable produce . the federation undertook all purchasing on behalf of the society, and the society agreed to receive the purchases and to dispose of them either for the supply of its own needs or for the victualling of centres. This combination made possible the acquisition of fairly large quantities of vegetables, and even allowed an influence to be exercised on the conditions of the market which had been seriously compromised by the excessive demand.

We should add that in 1917 the *Boerenbond* set aside a sum of 500,000 francs for making any needed loans to men who had been injured in the war. It proposed to buy for them a small farm or piece of land or to make them loans in cash. The loans would be for long terms and would bear no interest until after the first harvest which would follow on the conclusion of peace, when the borrower would, according to circumstances, pay 3 or 3 $^{1}_{4}$ per cent. As early as the end of 1917 a man injured in the war entered into possession of a small farm which he had acquired by the good offices of the *Boerenbond*.

§ 2. The sections of the Boerenbond

The *Boerenbond* has seven sections. the Farmwives' League, the General Horticulturists' Federation, the Purchase and Sales Office, the Dairy Inspection Office, the Central Credit Bank, the Inspection Department and the Insurance Department. We have already alluded to the activity of the General Horticulturists' Federation. We propose now rapidly to review the work of the other sections but to give more special attention to the Central Credit Bank.

1. *The Farmwives' League.* — In 1917 this league registered nine new

circles having a total membership of 980. It has in particular held lectures, 134 of them in all; but it has also been occupied by the institution, by means of the circles, of libraries infants' welfare centres and information offices, and by the organization of the breeding of rabbits for their fur. By means of the league the Louvain Institute of Zootechnique supplied well bred rabbits to fifteen circles.

2. *Purchase and Sales Office.* — The Purchase and Sales Office has suffered severely from the extreme shortage of supplies and of means of transport. Many orders had to be refused. It was found possible to execute 1,034, that is about 300 more than in the previous year. The total purchases and sales amounted to 8,719,155.37 francs. The total receipts and expenditure were 4,617,062.84 francs that is 2,328,290.23 francs of receipts and 2,288,772.61 francs of expenditure. The year closed with a deficit of 42,477.29 francs which is added to the deficits of 1915 (51,480.06 francs) and 1916 (26,594.97 francs). These results are to be ascribed to the small amount of business, income having been insufficient to cover general expenses.

3. *Inspection of Dairies.* — In 1917 the *Boerenbond* had in the three provinces which could be visited 89 affiliated co-operative dairies, namely 27 in the province of Antwerp, 32 in Brabant and 30 in Limbourg. During the year two new dairies, one in the province of Antwerp and the other in Brabant, secured affiliation.

Generally speaking, 1917 was a very unfavourable year for co-operative dairies and was even fatal to some of the most flourishing of them. Grave as was the position at the end of 1916 it grew yet worse in 1917. A chief cause of this was the regulation of the butter trade: the maximum price at which the dairies were obliged to sell butter has hardly varied while the prices of the irregular trade increased continually. In many districts the dairies were very severely controlled. The butter ration which a dairy could supply to its members was reduced by almost a half. It was the dairies in the *arrondissements* of Turnhout and Louvain which suffered most.

At the end of the year the order was given in many *arrondissements* to members who had ceased to deliver their milk to do so again and this had the effect of stopping the sale of separators to the members of the dairies. This obligation became generally binding in the *arrondissement* of Brussels, in which members had been forbidden to forsake their dairies since September 1916. The dairy production of the whole *arrondissement* had therefore to be left to the buttermaking dairies. In consequence of this measure some co-operative societies organized a separating station in neighbourhoods which had no dairy.

The quantities of milk treated were not considerable. Some dairies found that although they kept almost all their members they received much less milk than in the earlier years of the war, and in the winter months most of the steam dairies had to work only on three or four days in the week.

The lack of coal and the transport difficulties seriously prejudiced the

fortunes of the large dairies. Most of the steam dairies retain one centime for every litre of milk they treat. The fees thus collected, which in ordinary times generally sufficed in winter to cover all daily costs, now did not allow even the cost of the daily consumption of coal to be met.

The sale of whey, which used to be practised only in a few dairies, is now customary in most of the dairies in the provinces of Antwerp and Brabant. This innovation has been the salvation of several dairies: while paying good prices for whey they have realized on it a profit sufficient to cover part of their general expenses.

4. *Department for the Inspection of the Agricultural Gilds and the Purchasing Sections.* — On 31 December 1916, 226 agricultural gilds were affiliated to the Inspection Department. Eighteen gilds were formed in 1917 and 33 others spontaneously asked to be inspected: two gilds, of which one has ceased to exist while the other has been recast and transferred to the category of mixed syndicates, being deducted, the year 1917 closed with a total of 275 agricultural gilds.

A few years ago a purchasing section was almost everywhere so closely welded with an agricultural gild that the two institutions seemed to form only one: meetings, reports, financial transactions, documents — all were fused to a point which caused the gild and its purchasing section to be considered as a single indivisible organization. Of late years and especially since the outbreak of war the *Boerenbond* has sought to oppose this mistaken idea, drawing up model rules and endeavouring to bring about their adoption. At the end of 1916 the number of purchasing sections affiliated to the inspection department was 219 while on 31 December 1917 it had risen to 265. To reach this figure account was taken of 16 new foundations as well as of 31 existing sections which affiliated themselves spontaneously and of the suppression of one purchasing section. The model rules were adopted by 22 purchasing sections. If we add to these the 108 sections previously active, we reach a total of 130 purchasing sections which are governed by these rules.

5. *Insurance Department.* — The year 1917 marks a stage in the history of this department owing to the foundation within the *Boerenbond* of the Belgian Mutual Fire Insurance Society (*Mutuelle Belge contre l'Incendie*) on 10 April. It has the legal form of a co-operative society and distributes its profits among the insured in proportion to the paid-up premiums. Its first contracts were concluded in the beginning of May.

At the time of foundation a guarantee capital of 500,000 francs was constituted, and as a general rule each of the insured must subscribe for a share equal in amount to his annual premiums.

The society's board of management has decided:

(*a*) to extend its activity to the whole of Belgium;

(*b*) not to insure only the members of the *Boerenbond* or only farmers, but any person wishing to entrust the society with a desirable risk; we shall presently show, that members enjoy a larger reduction of premium;

(*c*) to reinsure to a large extent, especially in the first years.

The basis taken for the calculation of premiums is the tariff of the large

syndicated Belgian companies. On this tariff a total reduction of 15 per cent. is granted to members of the *Boerenbond*, but one of only 10 per cent. to the other insured.

Within eight months 8,240 policies, representing an insured value of more than 100,000,000 francs and about 200,000 francs of annual premiums, were concluded. Cases of damages were not numerous ; and although a large part of premiums had to be handed over to the reinsurers, profits were, if the period from May to December 1917 be taken as the first year of business, slightly more than 25 per cent. of premiums. Thus each member of the *Boerenbond* received for every 100 francs he would have paid as premium elsewhere an initial reduction of 15 per cent. or 15 francs ; that is he received 25 per cent. on 85 francs, otherwise 21.25 francs. The presumed profit accruing to him from his affiliation to the society was therefore more than 36 per cent. of the premium he would have paid to another insurance company.

§ 3. The central credit bank.

The year 1917 was for the Central Credit Bank a period of intense activity which had the same direction as the activity of the previous year. As an institution of credit the bank did very little, but as a savings-bank its business was so considerable that its balance of deposits increased by 37 million francs. At the same time its field of action was constantly enlarged, 77 new local banks being affiliated to it. This number is larger by 29 than the corresponding number for 1916 and by 33 than that of 1915 and it is more than double that for years which were formerly considered very successful.

Taking it that the institutions in the inaccessible parts of the country are intact, there were 562 local banks on 31 December 1917 which were affiliated to the Central Credit Bank. This number comprises almost all the banks of the provinces of Antwerp, Brabant, Limbourg and East Flanders, more than half those of West Flanders, and some in the provinces of Liège and Luxembourg. Most of the other banks belong to the central credit banks of their own provinces.

The following table shows what was, year by year, the total number of banks in Belgium, and the number of these which were affiliated to the Central Bank of the Boerenbond.

Year	Number of rural banks in Belgium	Number of banks affiliated to the Central Bank of the *Boerenbond*	
		Affiliations	Total
1897	159	95	—
1898	200	135	40
1899	230	158	23
1900	264	171	13
1901	284	183	12
1902	308	190	7
1903	361	195	5
1904	397	205	10,
1905	431	215	10
1906	468	230	15
1907	540	265	35
1908	584	286	21
1909	618	297	11
1910	643	304	7
1191	697	333	29
1912	738	363	30
1913	762	378	15
1914	777	393	15
1915	821	437	44
1916	873	485	48
1917	952	562	77

Distributing the banks by provinces we obtain the following table :

Provinces	Total number of rural banks	Number of banks affiliated to the Central Bank of the *Boerenbond*
Antwerp	99	96
Brabant	255	252
Limburg	121	117
East Flanders	48	41
West Flanders	78	47
Liège	53	7
Luxembourg	163	2
Namur	35	—
Hainault	100	—
	952	562

During the year the capital of the Central Bank was increased by 446 members' shares, so that on 31 December the number of subscribed shares reached 9,816. Each share has the value of 100 francs and carries a liability of 1,000 francs: the Central Bank therefore held at this date a guarantee capital of 9,816,000 francs as against 9,370,000 francs in 1916 and 8,987,000 francs in 1915.

Faced with the high figure which stands for savings deposits, a careless observer might ask how it is that such important business did not entail a greater increase of the guarantee capital of the Central Fund. This fact is precisely a consequence of the superabundance of deposits, for the increase of capital really depends on two factors — the credits opened and the loans on land Every local bank is bound to subscribe a share every time it receives the benefit of a credit for 1000 francs or intervenes as lending agent in the transaction of lending an equivalent sum on land. Since therefore savings deposits accumulate unceasingly, banks are hardly in need of applying for credit and the applications for loans on land are, in their turn, much reduced.

The total receipts and expenditure reached an extraordinarily high level. Between 1913, the last normal year, and 1916 they almost doubled, passing from 49,766,292.19 francs to 11,667,430.43 francs. By the end of 1917 they had more than tripled, having reached 190,162,223 francs.

Only seven credits, amounting to 162,000 francs, were opened during the year. The Central Bank grants them directly : thanks to the abundant funds entrusted to it, it can do without the General Savings Bank and Old Age Insurance Institute (*Caisse générale d'épargne et de retraite*).

This latter institution has 44 current credits of the total value of 166,000 francs, but the debt incurred under this head has been entirely repaid.

At the Central Bank there are still 463 credits, representing a capital of 5,071,500 francs. Here also the amount of the credits was not completely utilized and the sums lent were largely repaid. Thus on 31 December the debt of the local banks to the Central Bank had fallen to 306,900.45 francs, a moderate figure in comparison with the total sum for which credits were opened.

The following table shows the number of the credits current at various dates, their total sum, and the sums still utilized by the banks :

Year	Credits opened by					
	General Savings Bank			Central Credit Bank		
	Number	Total amount	Sum still utilized by the banks	Number	Total amount	Sum still utilized by the banks
		francs	francs		francs	francs
1897	33	89,300.00	11,842.00	8	19,550.00	17,452.00
1900	57	171,900.00	38,939.50	84	496,250.00	331,229.70
1905	63	208,900.00	25,280.39	163	1,027,550.00	386,068.92
1910	65	211,900.00	12,500.00	309	2,363,100 00	728,464.82
1913	65	211,900.00	21,806.68	408	3,953,400.00	1,078,537.63
1914	65	211,900.00	24,806.68	443	4,540,900.00	1,517,639.52
1915	44	166,000.00	3,806.68	464	4,904,450.00	1,013,637.31
1916	44	166,000.00	—	456	4,909,500.00	556,354.85
1917	44	166,000.00	—	463	5,071,500.00	306,909.45

As has already been said, savings deposits showed an unusual soaring movement. The Central Bank held on deposit on 31 December 1917 the sum of 77,362,300.38 francs, made up as follows :

74,783.633.35 francs from affiliated banks ;

1,243,917.03 francs from individuals ;

1,334,750.00 francs as term deposits (for ten years, withdrawable to order of depositor).

In 1913 savings deposits amounted to 16,110,371.17 francs ; in 1914 to 16,521,529.85 francs ; in 1915 to 22,723,841.10 francs ; in 1916 to 39,923,886.19 francs ; in 1917 to 77,362,300.38 francs.

The successive increases from one year to another were therefore 411,158.68 francs in 1914 ; 6,202,311.25 francs in 1915 , 17,200,045.09 francs in 1916 ; 37,438,414.19 francs in 1917.

No one doubts that the high prices at which agricultural products are sold are a chief cause of the uninterrupted increases. However other causes have influenced the situation : one such cause is notably the growing lack of chemical manures and concentrated foods, and another is the increasingly marked reduction of live stock. The consequence is that farmers have in hand and available a large part of their working capital.

Yet another circumstance has brought about an inflow of money ; a large number of financial establishments have reduced the interest on deposits at sight to 1 ½ per cent., whereas the affiliated banks of the *Boerenbond* have been able to mantain the ordinary rate of 3 per cent., the Central Bank continuing to pay them this interest.

Savings deposits are divided, as has been said, into three categories — deposits of affiliated banks, deposits of individuals, and term deposits. This last category was formed during the year to meet the wishes of a fairly numerous body who have no immediate use for their money and who do not wish either to suffer a loss of interest by investing it at sight or to run the rish of investing it in securities. The investment is for a term of ten years and the interest is 3.60 per cent. In return for the receipt for the sum he has paid the depositor has an account opened at the Central Credit Bank. If he were obliged to withdraw his money before the expiry of the period of ten years he could resume possession in the following cases :

(*a*) When after a death the heirs wish to divide property ;

(*b*) When the case is one of buying real estate or building a house ;

(*c*) When on the occasion of the marriage of their children, parents have to be placed in a position to settle them suitably.

In these cases, which are the most frequent, the Central Bank repays the deposited sums, less the small deduction of 2 per cent. Further if, following on special circumstances, the depositor be obliged to ask to have his deposit back for the needs of his farm, he may apply to have it repaid to him on the same terms. He also remains free to transfer all or part of his deposit to others.

Every half-year the interest due is entered as a deposit at sight, bearing interest at the rate of 3 per cent., in a special account in the name of the depositor who has always at his disposal the sums thus accruing.

The fact that term deposits amounting to 1,334,750 francs were thus received within five months, that is from August to November 1917, proves that this new branch of activity meets a real need.

On the other hand, owing to the abundance of money of which farmers disposed there were few applications for loans. Hardly 50 loans were made, namely:

1. By the medium of local banks 36 loans for 266,500 francs
2. By the Central Bank directly 14 » » 59,560 »

Total 50 » » 326,060

Of these loans there were:

2	from	1	to	1,000	francs	in	amount
11	»	1,001	»	2,000	»	»	»
8	»	2,001	»	3,000	»	»	»
3	»	3,001	»	4,000	»	»	»
6	»	4,001	»	5,000	»	»	»
13	»	5,001	»	10,000	»	»	»
5	»	10,001	»	20,000	»	»	»
1	»	20,001	»	30,000	»	»	»
1	above			30,000	»	»	»

50

Since the foundation in 1904 of the department for granting credit on real estate:

780 loans for 4,125,945 francs have been made through the local banks;
438 " " 2,349,460 " " " " by the Central Bank directly;

In all, 1,218 " " 6,475,405 francs

428 loans have been entirely repaid, 164 of them during 1917.

Extraordinary repayments made during 1904 numbered 581 and were for the total sum of 1,636,284.22 francs.

The total sum of the loans still to be repaid was 3,303,754.85 francs on 31 December 1917.

The following table shows the loans on real estate made since the foundation.

Loans on Real Estate since the Foundation.

Year	Number	Amount
1904	36	149,400
1905	88	462,540
1906	85	376,340
1907	77	426,150
1908	83	409,520
1909	80	420,650
1910	136	559,245
1911	130	597,825
1912	182	1.090.200
1913	111	676,250
1914	73	413,925
1915	27	115,400
1916	60	451.900
1917	50	326,060
	1,218	6,475,405

Of these 1218 loans there were :

180	from	1	to	1,000	francs
312	»	1,001	»	2,000	»
231	»	2,001	»	3,000	»
135	»	3,001	»	4,000	»
85	»	4,001	»	5,000	»
140	»	5,001	»	10,000	»
92	»	10,001	»	20,000	»
21	»	20,001	»	30,000	»
22	above			30,000	»
1,218					

The following table shows the objects for which these loans were made :

Objects of the Loans made from 1904 to 1917

	Loans from 1 to 1,000 francs	Loans from 1,001 to 2,000 francs	Loans from 2,001 to 3,000 francs	Loans from 3,001 to 4,000 francs	Loans from 4,001 to 5,000 francs	Loans from 5,001 to 10,000 francs	Loans from 10 001 to 20,000 francs	Loans from 20,001 to 30,000 francs	Loans above 30 000 francs	Totals
1 Purchase of houses	22	47	38	26	13	23	4	3	1	177
2 Building of houses	23	36	31	8	10	9	4	2	2	125
3 Purchase of farms .	—	2	9	4	2	14	8	3	4	46
4 Farm building .	2	1	—	1	2	6	2	3	3	20
5 Purchase of land . .	54	107	75	47	30	45	20	4	3	385
6. Building of stables, etc	—	3	3	1	—	—	—	—	—	7
7 Purchase of live stock	7	9	2	—	—	1	1	—	—	20
8. Repayment of debt	28	65	41	20	16	20	22	4	2	218
9 Division of property .	6	8	9	8	3	6	6	—	—	46
10. Construction of greenhouses . . .	2	3	—	1	1	—	—	—	—	7
11 Trading enterprise .	5	5	2	—	1	1	3	1	—	18
12 Various or insufficiently specified objects .	31	26	21	19	7	15	22	1	7	149
TOTAL . .	180	312	231	135	85	140	92	21	22	1,218

We have still to say a word as to the small war loans, which numbered only 15 during the year and were for a total sum of 7,600 francs. Thanks to these loans, 2,650 small farmers were able gradually to restore their farms. The money lent was in most cases used for the purchase of a cow or two calves, all the more important because the price of live stock subsequently rose considerably. Already 301 small loans, representing a sum of 133,922 29 francs have been entirely repaid, and on 109 others extraordinary repayments have been made up to the sum of 11,715.20 francs Since compulsory repayments reached 160,322 78 francs in 1916 and 21,754 81 francs in 1917, the total sum repaid was 507,715 08 francs on 31 December 1917, while the debt had been reduced to 798,509 92 francs

GREAT BRITAIN AND IRELAND.

THE PRESENT POSITION OF FARMERS' CO-OPERATION IN ENGLAND AND WALES

SOURCE :

THE JOURNAL OF THE BOARD OF AGRICULTURE Vol. XXV, No. 9 London, December 1918. Articles by REW (Sir R. Henry), Assistant Secretary, Board of Agriculture and Fisheries, ACLAND (The Rt. Hon. F. D.), SCOTT (Leslie, M. P.), CALTHROP (Ian), Dairy Organizer, Agricultural Organization Society, and others.

According to the last statistics of the Board of Agriculture there are 423,718 farmers in England and Wales. Of them only about 70,000 or one sixth belong to some 450 farmers' societies registered under the Industrial and Provident Societies Acts. Nevertheless a very large proportion farm land on a small scale and might therefore derive much benefit from co-operation It is estimated that there are only 51,767 holdings of more than 150 acres in England and Wales, and only 14,126 of more than 300 acres. To put the matter differently: only 3 per cent. of the farmers farm more than 300 acres each, only 13 per cent. more than 150 acres, and only 50 per cent. more than 50 acres. England and still more Wales are therefore countries of small farmers. It is these small men for whom agricultural organization can do most, supplying the capital and the specialized skill in buying and selling which they necessarily lack. But the large farmers — that 3 per cent. of the farming class who hold more than 300 acres and whose importance is proportionate rather to the area in their tenancy than to their numbers — will find it to their interest to take the lead in the movement for organization.

§ 1. THE NEED FOR ORGANIZATION.

Before the war a leading characteristic of British agriculture was the complete independence of farmers, their freedom from government control. The drawbacks to this condition were felt from time to time, for example in the two last decades of the nineteenth century when the State looked on with indifference while the cheapness of cereals, produced in virgin soils and imported under low freights, made it impossible for an English arable farmer to meet the losses ordinarily incident to bad seasons. But the war has taught the nation that a productive home agriculture is essential to its security, possibly to its existence; and public indifference on the subject has ceased.

Henceforth unless farmers produce the amount of food the nation wants, of the kind it wants and at the price it wants, they must expect either to suffer State coercion or to be superseded as an effect of State supervision or of free competition. The State's right to control them has been strengthened by the introduction of guaranteed prices. In return for the guarantees the State may insist on efficiency of production.

As regards competition, several new candidate for the position occupied by farmers of the old type have recently presented themselves.

As a competitor rather than a controller the State may probably be left out of account; for it is unlikely that in England and Wales the State will undertake the direct farming of land by means of officials. The large capitalist is a far more real rival to the independent farmer. Exactly as large multiple shops have in many cases supplanted small shops, there is a possibility that multiple farms in single ownership may to some extent supersede independent farms. There are already instances of commercial companies who appoint skilled managers and run as one business a number of separate farms, on each of which a foremen occupies the earlier place of the independent farmer. Another case is that of the very large commercial farm of about 5,000 acres. And side by side with the capitalist the organized small consumer is beginning to compete with the independent farmer. Thus the Co-operative Wholesale Society now owns 45,000 acres of land which will, according to the society's last report, "be used to develop a co-operative milk supply, and will constitute part of what we hope will ultimately be a huge system of co-operative dairy farms".

By organization it is possible for farmers to protect themselves against undue State control, to prevent occasion for control, to defeat competitors, to increase their own profits, and to improve the quality as well as the quantity of the goods they offer to the consumer.

§ 2. The present position of agricultural organization.

In our issue for May 1917 we examined in detail the work of the Agricultural Organization Society which groups most of the agricultural societies in England and Wales; and in our issue for last January we gave detailed statistics with regard to all agricultural co-operative societies in the United Kingdom. All we therefore purpose to do at present is briefly to review the more important types of organization. There are, in round figures, in England and Wales, 250 societies for the purchase of farmers' requisites, 70 egg and poultry societies, 60 fruit societies, co-operative auction societies, etc., 50 dairy societies and 22 credit societies, in addition to 540 allotment societies; that is 992 agricultural societies as against 550 in 1915. The turnover of these societies was, roughly, £8,000,000 in 1918 as against £3,000,000 in 1915; and their combined membership was about 155,000 in 1918 and about 55,000 in 1915. Of farmers' as apart from allotment societies the total membership was, as we have already stated, about 70,000 in 1918, as against about 40,000 in 1915. Thus it is clear that the

movement for co-operation among farmers has made progress during the war.

A. *Buying Societies.* — Co-operation for the purpose of buying requisites is comparatively easy to organize ; and most successful societies have begun their activities by buying fertilizers, feeding stuffs, seeds, implements or other supplies for their members. As a general rule, there is nothing a farmer buys which cannot be bought better by a co-operative society than by himself, for if the society be efficiently organized its buying is done by an expert. Naturally, all local societies cannot employ a specialist to buy every kind of agricultural supplies ; but they can secure this expert service by federating. Thus they can join the Farmers' Central Trading Board (1), which has its headquarters in London and exists to supply its members with farming requisites. By ensuring the quality of farmers' supplies buying societies can raise the level of production.

There are some notable examples of buying societies. The Furness and South Cumberland Supply Association, Ltd., was formed in 1880 and joined the Agricultural Organization Society only in 1917. It has 384 members and its turnover in 1918 was £37,696. The Wimborne and District Agricultural Co-operative Society was formed in 1916 with the object of supplying feeding stuffs and other requisites to farmers and small holders in the district of Wimborne. Stores, where large and small purchases could be made, were established at Wimborne. Shortly afterwards a market for members' produce was founded in Bournemouth, but this department has recently been handed over to the County Fruit and Vegetables Society. In 1917 the Wimborne and District Agricultural Co-operative Society had 263 members who held £979 in shares, and its turnover, including the commission from the market, was £20,000.

B. *Selling Societies.* — The co-operative selling of agricultural produce benefits both the farmer and the consumer. The farmer can by selling through a society make sure that he secures all the profit due to him. If, for instance, the bulk of the wheat crop were sold by co-operative organization, each farmer might secure the full price justified by the quality and condition of his grain, and the miller might further be compelled to return the whole of the offals to him to use as foodstuffs. To the consumer, on the other hand, a co-operative society is in a position to guarantee the quality and condition of the produce it sells.

Hitherto, milk has been sold co-operatively more than any other product of agriculture, probably because the advantages of a common collecting, cooling and selling of milk are peculiary obviously. In the summer of 1918 the dairy societies dealt with about 150,000 gallons of milk a day. The co-operative selling of fruit and vegetables has also made good progress, the necessity for the careful packing and grading of market-garden produce which is to sell well being recognized. Co-operative societies have also been active in collecting and selling eggs and poultry.

Among successful selling societies we should mention the Auction

(1) See the article previously cited in our issue for May 1917, page 23.

Markets at West Bournemouth and Boscombe which has collecting depots for vegetables and fruit in nearly every village round Bournemouth. A motor lorry collects the produce of the small growers; and this is put up for auction and sold to Bournemouth householders on the day after collection. Prices to consumers are less than shop prices; and prices to growers more by from 30 to 60 per cent. than those obtained otherwise. About £15,000 worth of produce is sold annually. The Wiltshire Farmers is an association of milk producers of which the membership was doubled — rising from 600 to 1200 — between 1916 and 1917. Of the 600 new members 120 held only 5 acres or less. The members send their milk to two depots where it is cleaned, pasteurized and chilled. The Preston and District Farmers' Trading Society, Ltd., typifies agricultural organization at its best. Over £40,000 of farmers' capital is invested in this society; it had nearly 1,000 members in 1917 whereas in 1911 it had only 208; its sales in 1917 amounted to more than £360,000; and it pays a dividend of 3*d.* in the pound. It has mills or depots at thirteen centres.

C. *Societies Treating Agricultural Produce.* — Co-operation can enable farmers to retain control of their produce after it has passed beyond the stage of raw material, and therefore to receive profits which ordinarily go to others. Already there are a considerable number of farmers' co-operative societies which subject produce to the processes necessary to prepare it for consumption. Thus five co-operative slaughterhouses are fully at work. In our issue for February 1918 we gave an account of a very successful bacon factory at St. Edmundsbury (1). It is however in the manufacture of the derivatives of milk that co-operation has been most important.

The following figures show the increase since 1913 of the number of the co-operative societies for the treatment of milk affiliated to the Agricultural Organization Society.

Kind of Society	1913	1914	1915	1916	1917	1918
Cheese factories and milk depots .	20	25	30	30	31	49
Buttermaking societies	2	2	2	2	2	2
Butter blending societies	1	1	1	1	1	1

It is seen that the increase has been confined to the cheesemaking societies. Both privately owned and co-operative creameries have of late years turned their attention to cheesemaking rather than to buttermaking.

An interesting experiment was made in 1914 when the Board of Agriculture in conjunction with the Cornwall County Education authorities established a co-operative cheese school at Lostwithiel. Its object was to prove to farmers that better returns could be obtained from cheesemaking than buttermaking and that a co-operative factory had advantages, and also to give instruction in cheesemaking under factory conditions. The experiment was so successful that nine similar schools were at work in

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1917 and no less than eighteen in 1918. Almost all of them were in the west of England and in Wales.

The following figures explain the cheesemaking done by the schools in 1917:

School situated in	Quantity of milk received	Quantity of cheese sold	Value £	s	d
Cornwall	30,309 gallons	32,060 lbs.	2,018	11	10
»	33,693 »	35,300 »	2,203	8	7
Carnarvon	12,117 »	14,368 »	891	17	10
Cheshire	9,388 ½ »	10,470 »	627	18	10
Denbigh	20,602 »	23,126 »	1,357	0	10
Montgomery	10,487 ½ »	10,902 »	664	18	5
Hereford	22,925 »	23,660 »	1,226	16	5
»	7,941 ¾ »	8,074 »	535	15	11
Wiltshire	10,056 ¾ »	10,441 ½ »	620	0	0
Total	157,520 ½ »	168,341 ½ »	10,186	8	8

In addition, 85 pupils were received in these schools. Some of them afterwards found local employment as cheesemakers while others went to cheese factories outside their own districts.

§ 3. The future direction of agricultural organization.

As regards the best form of agricultural co-operation, authoritative opinion is divided. Sir Henry Rew of the Board of Agriculture writes that the "tendency, both at home and abroad, for co-operative associations to be specialized *i. e.* to confine their operations to a particular kind of produce, appears to continue, and probably affords the best, if not the only means, in most cases, of getting the co-operative principle accepted in a district, leaving the linking up of specialized societies to a later stage of development." The contrary opinion is expressed by Mr. F. D. Acland. "Societies now specialized should become general purpose societies. With whatever primary purpose a society is formed it should have its agricultural store, its credit and banking department, its small produce department, its land owning or renting department. But there should be more than these forms of organization for profit... Its most important department should be that of the public good. It should promote village and home industries so as to give interesting work for women. It should make our hedges bear fruit-trees rather than thorns and see that this, and other communal property is respected. It should be able out of its profits, almost without feeling the burden, to build village halls and recreation rooms, to start libraries and reading-rooms, to run a cinema...". Mr. Leslie Scott while taking a narrower view of the duties of a co-operative society yet does not advocate too much specialization. "Here in England and Wales

we have found that the kind which serves our need best is the large society, covering a considerable area and conducting more than one type of business. There may be several sides to such a society's work."

As regards the particular kinds of business which should be the object of further co-operative effort, it is urged in particular:

1) That there should be many more co-operative slaughterhouses, the present number being multiplied even a hundredfold: this would give the home farmers a fair chance to compete with the importers of foreign meat.

2) That there should be a multiplication of agricultural credit societies. As stated in the article in our issue for last January (1) there were only 48 agricultural credit banks in England and Wales in 1916 as compared with 279 in Ireland.

3) That it should be an integral part of the work of all societies to help to keep their members' accounts and to determine the costs of production.

4) That all dairy societies should undertake milk recording, the systematic inspection of dairy herds and the elimination of bad bulls; and that dairy societies should handle a far larger proportion of the country's milk supply than they do at present.

5) That producing societies should adopt the methods of the Irish Creamery Butter Control, that is they should institute trade-marks which would be applied only to goods produced well and in sanitary conditions and would therefore be a guarantee of quality.

6) That agricultural implements and, in particular, motor tractors should be co-operatively bought and owned.

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MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE LIMITED LIABILITY COMPANIES IN THE ARGENTINE REPUBLIC WITH SPECIAL REFERENCE TO THE FARMING, STOCK FARMING AND COGNATE INDUSTRIES — *Monitor de Sociedades anónimes y patentes de invención*, No. 157, Buenos Ayres, November 1918.

The Argentine review called "Monitor de Sociedades anónimas" published in its last issue a full report on the progress of limited liability companies in the Argntine, taking as basis the results of the last census, and opportunely completing these with new data and noticing the successive development of societies of this form.

According to the data reproduced in this review the legally constituted limited liability companies on 31 December 1914 numbered 679 and had a capital of ordinary and preference shares and bonds of 4,608,614,669 pesos. It should be noted that the capital effectively furnished by the shareholders was 3,826,697,627 pesos, the price of issue being 4,162,526,720 pesos.

As we shall notice later the value in moveables which served as a basis to the statistics of 1914 should be considered far greater than appears from the data, for such value largely escaped the census, less because of a real and true omission or the carelessness of those taking the census than because many companies, for various reasons, were not entered in the public trade register. In any case the development which this modern form of investment of capital for purposes of industry and trade has assumed in the Argentine is notable. In fact in 1908, according to the census of that year, the limited liability companies numbered 490 and had a capital of 2,218,740,015 pesos (gold), including 676,728,087 pesos which represented consolidated State, provincial and communes' debt securities not figuring in the 1914 census.

In the following table we reproduce data as to the share companies most closely connected with agriculture and with trade in the products of arable and stock farming, and also with the intermediary industries of which the development is closely connected with the development of arable and stockfarming in the country.

We will now briefy notice each group of companies, placing them in the descending order of the prices of their shares at issue:

We have first of all the group of the *Banking Institutions:* of the 69 figuring in the table 12 are constituted with foreign and 57 with Argentine capital; 36 work in the city and 13 in the province of Buenos Ayres, 3 in Santa Fé, 2 in Entre Rios, 5 in Corrientes, 2 in Córdoba, 1 in Mendoza, 4 in San Juan, 1 in Catamarca, 1 in Salta, and 1 in Santa Cruz. They do

TABLE I. — *Limited Liability Companies in* 1914.

Number of limited liability societies	Branches of trade and industry	Capital in pesos m/n (1)			Paid-up capital	Price at issue
		Ordinary shares	Preference shares	Bonds	pesos m/n	pesos m/n
69	Banks	659,769,693	12,755,926	4,779,280	576,528,940	682,921,559
87	Loans and buildings	278,301,034	41,025,695	382,675,244	453,187,244	520,427,136
71	Insurances . . .	387,667,297	25,195,025	12,774,600	160,691,108	296,903,282
82	Agriculture and stockfarming . .	140,337,381	9,059,566	27,365,852	117,726,559	147,353,550
11	Cold storage . .	50,734,505	21,910,000	8,600,000	79,444,041	81,244,041
12	Sugar industry .	45,544,770	5.007,500	12,487,727	58,518,270	58,197,277
24	Purchase and sale of real estate .	45,497,600	—	5,233,000	45,030,285	45,730,600
14	Forestry	31,212,247	2,783,080	1,187,000	34,682,327	34,682,320
8	Viticultural and winemaking societies	28,017,000	138,136	5,115,153	30,778,336	31,602,000
9	Dairy industries	6,007,891	3,584,091	1,488,500	11,080,482	11,088,532
8	Irrigation	7,774,640	702,773	—	8,435,490	8,759,723
9	Flourmils . . .	6,478,000	300,000	—	6,778,000	6,778,000

(1) National money.

not of course represent all the banking establishments in the Argentine, for, as we know, there are in the Argentine many other institutions which do credit business and are not entered among the limited liability companies either because they belong to private individuals or because they have foreign names.

There follow these, after a short interval, the group of the *loan and buildings* companies of which there are 87, 37 being exclusively mortgage companies. Of the latter 15 are Argentine companies and have a capital of 27,000,000 pesos while 22 are foreign companies and have a capital issued at 314,800,000 pesos.

From figures supplied to the government in 1915 — that is to say a year after the last census — by a committee specially appointed to give information as to the amount of the mortgages burdening landed property in the whole republic, it appears that the national capital covered by mortgages reached 1,852,949.302 pesos and the foreign capital 1,136,399,914 pesos (national money).

The *insurance companies* have attained to a really noteworthy activity. Of the 71 which appear in the table, 53 are Argentine and have an effective capital of 37,823,682 pesos (national money) while 18 are foreign and

have a capital of 258,079,600 pesos (national money). But these figures do not show the exact number of the insurance companies in the republic for many of these institutions which were in the provinces were not registered. We can therefore presume that the capital invested in this branch of business was far larger than appears from the table reproduced.

There follows the group of the *agricultural and stockfarming companies* which also have gradually developed. Because many companies did not remit the data required by the census at the right time the figure shown in the table is not exact. According to the investigations made on this point this figure should be increased by 20,000,000, and 167,353,550 pesos instead of 147,353,550 pesos should be attributed to agricultural and stockfarming enterprises. These figures greatly exceed those for the preceding years: according to the data for 1906 the capital invested in agricultural and stockfarming companies then amounted to 32,296,481 pesos (gold).

The *cold storage companies* follow. The great development to which in a few years the cold storage industry has attained in the republic is known to us. The capital invested in this industry was 19,962,679 pesos (gold) in 1906 and 81,244,041 pesos at the time of the last census.

The *sugar industry companies* have also had a notable development. Besides the data referring to them in the census we have data furnished by other enquiries, whence it appears that the capital invested in the production of sugar consisted of 189,848,471 pesos being the value of the sugar refineries, and 33,637,000 pesos being the value of 42,047 hectares of land on which sugar-cane is grown, that is 223,486,071 pesos in all.

We should note that at the date of the census 42 sugar-refineries existed, 30 being in the single province of Tucumán which is known to be that producing most sugar.

The *companies for the purchase and sale of real estate* come next. Most of them were founded for the purpose of speculation and were not of long duration. On the other hand the *forestry companies* have continually gathered strength, not only because of the large returns they obtain for their products but also because they enjoy opportunities for practising arable and stockfarming, for they can make use of the vast and fertile extents of land which deforestation places at their disposal.

Continuing the descending scale we come to the *viticultural and wine-making companies* which, except for one in Patagonia, are all situated in San Juan and Mendoza, known to be wine producing provinces on account of the special characteristics of their land which lends itself admirably to vine-growing. Besides these companies, few in number, the republic has 4,137 *bodegas* in which grapes are converted into wine. They represent a capital of 182,725,984 pesos and the value of their production is 85,291,164 pesos (national money).

There follow the *dairy companies* of which, as we see, there are only 9. There are however 816 industrial establishments which treat milk in the Argentine and they have a capital of 100,785,396 pesos (national money). Since 1914 the number of limited liability companies practising this kind of industry has noticeably increased, either because many private firms have

been converted into companies or because the exportation of the derivatives of milk has increased continuously in spite of the difficulties of maritime transport.

Finally, the *irrigation companies* are not numerous. They have not yet reached a development adequate to the needs of agriculture in the Argentine any more than have the *flourmill companies*. As regards the latter industry however, which is entirely in Argentine hands, we should note that beyond the data in the table there are others obtained by a special census made in 1914 and showing that there are in the Argentine 498 mills having a capital of 38,336,442 pesos (gold).

To complete this rapid survey of Argentine limited liability companies specially connected with agriculture and with the products of arable and stockfarming, we give in the following table the maximum and minimum dividends distributed by the companies reviewed.

TABLE II. — *Maximm and Minimum Dividends distributed by the Companies.*

Branches of trade and industry	Dividends	
	Minima	Maxima
Bank	6 %	23 %
Loan and building	4 %	28 %
Insurance	5 %	200 %
Agriculture and stockfarming	250 %	30 %
Cold storage	6 %	25 %
Sugar industry	5 %	10 %
Purchase and sale of real estate	8 %	16 %
Forestry	5 %	6 %
Viticulture and winemaking	10 %	10 %
Dairy industry	4 %	40 %
Irrigation	—	—
Flourmills	6.31 %	15 %

Even leaving out of account the high dividends of the insurance companies, indubitably due to special causes, we find that all the companies we have examined have, as is seen from the table, distributed remarkable dividends. This shows that, as has been said on previous occasions, the Argentine owing to its natural wealth offers a remunerative investment to capital, especially where industries connected with the land are concerned.

CANADA.

CO OPERATION IN THE EGG INDUSTRY — *The Agricultural Gazette of Canada*, Vol. V, No 11, Ottawa, November 1918.

Co-operation has made immense strides in agricultural Canada during the last three or four years and probably in no particular more thoroughly than in the handling and marketing of eggs, to which both the federal and provincial governments have given attention and in which they have accomplished much.

The co-operative egg circle, which is at the basis of the organization, is an association organized among farmers for the purpose of marketing eggs frequently and regularly through a common medium. The object is to maintain the quality of the eggs as they leave the farm and to place them in the hands of the consumers with the least possible delay and in good condition It has been estimated that Canadian farmers before they adopted co-operation annually lost between five and six million dollars as a result of carelessness in handling and marketing eggs. The co-operative marketing of eggs and poultry has lifted poultry farming to a higher level, has made the market for eggs and poultry more stable, and has improved hen-houses, the feeding of poultry and conditions generally.

Co-operative Egg Selling in Prince Edward Island. — In Prince Edward Island the system has perhaps reached a greater completness than in any other part of Canada. In the rules adopted by the Egg and Poultry Selling Association in pursuance of the provisions of an Act passed by the legislature of Prince Edward Island in 1917, the objects of this society are set forth as the encouragement of the production and marketing of eggs and poultry and of matters connected therewith; the supervision and encouragement of such commercial enterprises as may be deemed advisable for facilitating the more profitable production and sale of the produce of the members; the encouragement of the purchase for breeding of improved strains of highly productive poultry and their distribution. A board of seven directors is elected, and the officers of each association are required to sign in its favour a collateral note for an amount not exceeding $25. The board is authorized to employ an egg collector. Each circle must hand over to the associations a small percentage to meet unavoidable expenses, and each circle reports annually to the association and keeps it posted. An arbitration board of three members is chosen by the association's board of directors.

Arrangements are made for the assistance of the circles in case financial loss is sustained by the association. Members of an egg circle are required to deliver all the eggs they do not use for their own housekeeping or for breeding purposes, or which they wish to sell for breeding purposes, at a time and place determined by the board of directors of the egg circle All eggs delivered are required to be unbroken, clean and not more than a week old, weather and roads permitting. No member is allowed to dispose through an egg circle of the eggs of any but his own hen.

The Co-operative Organization in Nova Scotia. — Conditions in Nova Scotia were unlike those in Prince Edward Island and rendered the collection of eggs on any particular route more expensive.

The fact was recognized that there was a large production to place eggs on the market in April, May and June and that a great number of the eggs then produced were lost. It was decided to adopt as an experiment the plan of preserving the eggs by building cement tanks in different parts of the province, collecting the eggs in the season of low prices and storing them in the tanks with a preservative (*sodium silicate*), and placing them on the market in the winter season, thus relieving the scarcity which then exists. Thus the consumer would reap an advantage and the average price to farmers of eggs produced in the spring would incidentally increase. The system worked satisfactorily and gave good results. During 1917 at least 16,000 dozen eggs were thus handled at three different points in the province. Each circle selected its own collector and manager and charged 4 cents a dozen on the proceeds of sales for handling and marketing the eggs collected. The balance of the proceeds was paid to the farmers after the eggs had been sold. This plan increased the spring prices from 5 cents to 11 cents a dozen. The eggs were candled into the tanks, and candled out of the tanks into cases for consignment, and the circles could therefore guarantee their quality.

The provincial Department of Agriculture which organized this co-operative marketing of eggs assumed no financial responsibility with regard to it. It agreed only to supply the market and help to organize the circles, all other work falling on the managers of the circles.

The Organization of Quebec Province. — In Quebec the necessity of better regulating egg production and methods of marketing was recognized at a meeting held at Macdonald College in 1916.

A great impetus was given to the movement by the Quebec Farmers' Experimental Union and the Quebec Cheesemakers' Agricultural Co-operative Association, helped by the Poultry Division. Eggs are collected by the local agricultural co-operative associations of which there are more than 200 in the province They are all stamped with a stamp furnished to members for this purpose ; and they are sent from the local associations to the Central Co operative, otherwise the Cheesemakers' Co-operative Association. As each egg bears a number it is easy to identify its producer who is paid according to the quality of his product.

In addition to the local associations mentioned some egg circles have been formed in the last few years in the eastern townships and the district of Shawville (Pontiac). Some of these circles also sell their eggs through the central association. Their members are not however obliged to stamp their eggs ; and because it is therefore impossible to identify producers the circle receives, as a rule, an average price for each consignment instead of payment according to quality for each dozen eggs.

The co-operative system of selling is as follows :

(1) The eggs, stamped by the producer as stated, are delivered on a certain day of each week to the local secretary, or to a person designated by

the local association. Each egg bears its producer's number. If the producer live at some distance from the local consigning offce he may send his eggs directly to the headquarters of the central association. His eggs are numbered in any case.

(2) All boxes of eggs received are sent to the city by the local secretary who receives a small remuneration for his work.

(3) The eggs are graded on arrival. The proceeds of sales, less consignment charges and 2 per cent., are returned to the local secretary, and distributed among the producers according to the quantity supplied by each of them.

Progress of Co-operation in Ontario. — In Ontario the progress made in marketing eggs co-operatively has been most pronounced. In 1916, 36 circles reported 1,416 consignments of 382,808 dozen, representing in gross value to the circles $104,227.36. In 1917, 40 circles reported 1,605 consignments of 542,853 dozen, representing in gross value $209,837.31. These returns were for eggs only. The upward tendency is plainly continuing.

The Situation in the West. — In the West the legislation as to marketing eggs is administered by the Federal Live Stock Branch, especially as regards inspection, and has resulted in a great improvement of methods. Here again history repeats itself. Among the eggs which first left the country there were marked discrepancies of quality, and Western eggs acquired such a bad reputation that there was a tendency among Eastern dealers to venture no more with them. Under the system initiated by the Federal Live Stock Branch merchants are compelled to candle and grade their eggs before consigning them, all eggs are government inspected, and each case bears a government stamp. The percentage of eggs of low grade is now exceedingly small.

Owing probably to more or less newness of settlement and the distances that have to be covered, it has been found that the system of co-operative egg circles followed in the Eastern provinces is not altogether applicable to the Western provinces. In this part of Canada other methods, which are developing the egg industry, have therefore been adopted. Those applied in Alberta are explained as follows by the Poultry Marketing Commissioner of the province:

"1st. The establishment by the two Departments of Agriculture, dominion and provincial, acting jointly, of a marketing service, situated in the two logical marketing centres of the province, Calgary and Edmonton. The station in Calgary was established in the month of June 1917. It is proposed to open the Edmonton station early in the season of 1919.

"2nd. The marketing service to receive, candle and grade shipments of eggs from farmers and farmers' organizations, and to render a report as to grading of individual producers' lots of eggs, if any, and the quantity of each of two general grades.

"3rd. Any farmers' organization to have the privilege of sending shipments of eggs to the marketing service. It is suggested to any interested organizations that an egg marketing committee be formed, and that

all matters pertaining to the business of assembling eggs and making shipments be assigned to this committee.

" The selection of a shipper, the settlement of his commission, and general oversight over the work at the local point, constitute the principal duties of the marketing committee. It is often thought preferable by the local organization to instruct its regular executive to undertake the necessary local arrangements and become responsible for the supervision of the work at the local point. "

The report of the central office of the marketing service shows that in the 1917 season farmers and farmers' organizations took advantage of the service at 23 points throughout the country, and 182 consignments of eggs were received and marketed, that is 450 cases of eggs or 13,326 dozen.

The reports up to September show that in the 1918 season regular consignments were received until that month from 65 points, in all 1,739 consignments which included 4,286 cases of eggs or 128,580 dozen.

DENMARK

THE GENERAL UNION OF CONSUMERS' CO-OPERATIVE ASSOCIATIONS IN 1916 AND 1917 (1).

In continuation of our earlier notes on consumers' co-operative associations in Denmark (2), we will show the most important results of the activity in 1916 and 1917 of the General Union of co-operative societies.

On 31 December 1917, 1,574 associations, or almost the whole number of those in Denmark, belonged to the General Union. Their membership was 245,544. The few data which follow will show what has been the progress of the movement since 1896.

Their reserve funds, which amounted to 350,000 crowns on 31 December 1901 had reached 1,110,000 crowns on 31 December 1905 ; 2,775,000 crowns on 31 December 1910 ; 3,657,000 crowns on 31 December 1912 ; 4,276,000 crowns on 31 December 1914 ; 4,583,000 crowns on 31 December 1915 ; 5,666,000 crowns on 31 December 1916 ; 6,657,000 crowns on 31 December 1917.

	Number of associations belonging to the Union	Membership	Total purchases and sales in millions of crowns
	—	—	—
1896	310	—	4.2
1901	681	90,972	13.5
1903	852	115,672	19 8
1905	1,020	143,031	26.3
1907	1,180	168,696	36.4
1909	1,224	173,808	41.7
1911	1,286	181,326	48.8
1913	1,359	194,337	62.0
1914	1,407	210,402	69.6
1915	1,488	232 128	71.5
1916	1,537	239,772	84.5
1917	1,574	245,544	81.6

(1) Note sent by our correspondent in Copenhagen.

(2) See our issue for January 1917, page 17

The General Union does not only trade but also exercises a considerable manufacturing activity. The following figures give an idea of its business in the two spheres.

Commercial Activity.

(Value of operations in millions of crowns)

	1917	1916	1915	1914	1913
Department of colonial provisions	55.6	59.1	50.4	38.5	35.4
» » manufactured goods	8.7	7.2	5.2	4.9	4.6
» » edge-tools	7.2	6.4	5.0	4.2	3.7
» grain	3.8	4.3	4.1	2.7	2.4
» » timber trade	0.3	0.3	0.2	0,2	0.2
» » heavy goods	0.0	0.3	0.6	0.4	0.3
» » wine	—(1)	—(1)	0.6	0.3	0.3
» » packing	6.0	6 9	6.0	6.0	5.1
» » cycles	—(1)	—(1)	0.3	0.3	0.2
Total	81.6	84.5	72.4	57.5	52.2

Manufacturing Activity.

(Value of operations in millions of crowns).

	1917	1916	1915	1914	1913
Coffee roasting	3.2	3.4	2.9	2.8	2.7
Manufacture of chocolate	1.3	1.1	0.8	0.7	0.6
» of sugar	0.5	0.5	0.4	0.3	0.3
» of tobacco and cigars	1.3	1.1	1.0	0.8	0.8
» of rope	1.1	0.8	0.6	0.5	0.4
» of soap	2.0	1.3	1.1	1.0	0.9
» of chemical products	0.4	0.3	0.2	0.2	0.2
» of knitted goods	0.3	0.3	0.2	0.2	0.2
» of margarine	3.5	5.8	6.1	4.7	3.2
Spice mills	0.5	0.5	0.4	0.4	0.3
Tea department	0.1	0.2	0.2	0.2	0.2
Packing	0.7	1.1	1.1	0.8	—
Total	14.9	16.4	15.0	12.6	9.8
Wine department	0.6	0.7	—(2)	—(2)	—(2
Cycles »	0.8	0.5	—(2)	—(2)	
Totals	16.3	17.6	15.0	12.6	

It is seen that the figures in this table show the influence of the war, as do the profits which were 2,846,000 crowns in 1912; 3,048,000 crowns in 1913; 3,825,000 crowns in 1914; 5,005,000 crowns in 1915; 7,079.000

(1) See under "Manufacturing Activity". — (2) See under "Trading Activity".

crowns in 1916; and fell to 6,330,000 crowns in 1917. Of the sums standing for purchases giving a right to a distribution of dividends the associations belonging to the General Union received 5.5 per cent. in 1912, 5.5 per cent. in 1913, 6 per cent. in 1914, 7 per cent. in 1915, 7 per cent. in 1916 and 7 per cent. in 1917.

We will conclude by reproducing the General Union's balance-sheet on 1 January 1918, 1917, 1916, 1915 and 1914.

General Union's Balance-Sheet.

(in millions of crowns).

ASSETS.

	1918	1917	1916	1915	1914
Stock of merchandise	14.25	13.14	11.09	7.35	6.76
In hand	0.13	0.19	0.10	0.07	0.06
Furniture and equipment	0.00	0.27	0.32	0.39	0.29
Real estate	5.28	5.03	4.90	4.63	4.20
Various debtors	12.55	12.31	9.17	8.30	8.37
Total	32.21	30.94	25.58	20.74	19.68

LIABILITIES.

	1918	1917	1916	1915	1914
Co-operative societies' account	1.00	0.97	0.93	0.80	0.78
Reserve fund »	6.29	5.67	4.58	4.27	3.99
Dividends »	0.22	0.20	0.23	0.18	0.15
Creditors' »	2.80	2.40	1.99	2.34	2.90
Insurance against fall in prices	0.57	0.56	0.57	0.27	0.20
To be deducted from value of buildings	4.50	4.00	3.50	3.50	3.00
Insurance account	0.60	0.40	0.10	0.10	0.10
Renewal	1.00	0.50	0.50	0.50	0.50
Insurance against disturbance of business	0.50	0.50	0.30	0.10	—
Loans on real estate	0.48	1.01	0.99	1.00	1.32
Various credit	6.82	7.28	6.37	3.81	3.65
Carried over from previous year	1.10	0.37	0.52	0.04	0.04
Net balance	6.33	7.08	5.00	3.83	3.05
Total	32.21	30.94	25.58	20.74	19.68

GERMANY.

THE RAIFFEISEN SOCIETIES DURING 1917. — *International Co-operative Bulletin* 12th year, No. 1. London, January 1919.

On 1 January 1919 the General Union of German Raiffeisen Societies consisted of 15 national and provincial unions, the Central Agricultural Loan Bank with 14 branches, 4 goods departments, a printing and publishing department, 4 central banks of agricultural societies, the Provident

Union of Raiffeisen goods departments, the firm of Bierschenk Ltd. of Hamburg (an agency of foreign trade), and the members of the unions, namely 4,712 savings and loan societies which at the same time act as purchase and sale societies, 1,096 agricultural societies, and 16 members consisting of companies, associations, etc., or a total of 5,854 members or 104 more than in the previous year. New enrolments numbered 137 and withdrawals from membership 33.

Of all the societies the credit societies are the most numerous. Other numerous classes are constituted by the societies for the sale of milk of which there are 307 and the electrical supply societies of which there are 332. There are also 83 co-operative purchase and sale societies, 47 distilleries, 42 vintners' societies, 79 threshing societies, 21 granary societies, 35 societies for the sale of cattle, 17 potato drying societies, 16 consumers' societies, 15 horse breeding societies.

Silesia is the province which has the largest number of Raiffeisen societies, namely 864.

The Raiffeisen societies comprise one fifth of the German agricultural societies and quite three fifths of the societies affiliated to the Imperial Union. Their membership gradually increased from 4,918 in 1907 to 5,854 in 1917.

The Central Agricultural Loan Bank increased its turnover from 4,599,000,000 marks to 6,300,000,000 marks.

Part I: Insurance and Thrift

ITALY.

RECENT PROVISIONS FOR COMPULSORY INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR.

SOURCES:

TESTO UNICO DELLA LEGGE PER GLI INFORTUNI DEGLI OPERAI SUL LAVORO APPROVATO CON R. DECRETO 31 GENNAIO 1904, No 51 (*Consolidated Text of Law as to the Accidents of Workmen during Work, approved by the Royal Decree of 31 January 1904, No. 51*).

DECRETO-LEGGE LUOGOTENENZIALE 23 AGOSTO 1917 N. 1450, CONCERNENTE PROVVEDIMENTI PER L'ASSICURAZIONE OBBLIGATORIA CONTRO GLI INFORTUNI SUL LAVORO IN AGRICOLTURA. (*Lieutenant's Decree-Law of 23 August 1917, No. 1450, providing for Compulsory Insurance against the Accidents of Agricultural Labour*). *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 218, 14 September 1918.

RELAZIONE AL PROGETTO PRESENTATO ALLA CAMERA DEI DEPUTATI NELLA SEDUTA DEL 16 OTTOBRE 1917 PER LA CONVERSIONE IN LEGGE DEL DECRETO LUOGOTENENZIALE SOPRA CITATO. (*Report on a Bill submitted to the Chamber of Deputies at the Session of 16 October 1917 for the Conversion into a Law of the aforesaid Lieutenant's Decree*). Camera dei Deputati, Atti parlamentari, No. 836.

DECRETO LUOGOTENENZIALE 21 NOVEMBRE 1918, N. 1889, CHE APPROVA IL REGOLAMENTO PER L'ESECUZIONE DEL DECRETO-LEGGE SOPRA CITATO (*Lieutenant's Decree of 21 November 1918, No. 1889, approving the Regulation for the Execution of the aforesaid Decree-Law*). *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 300, 21 December 1918.

DECRETO LUOGOTENENZIALE 24 NOVEMBRE 1918, N. 1890, CIRCA GLI INFORTUNI SUL LAVORO IN AGRICOLTURA (*Lieutenant's Decree, 24 November 1918, No. 1890, as to the Accidents of Agricultural Labour*). Ibid.

L'ASSICURAZIONE OBBLIGATORIA CONTRO GLI INFORTUNI IN AGRICOLTURA (*Compulsory Insurance against the Accidents of Agriculture*). Cassa Nazionale di Assicurazione per gl'Infortuni degli Operai sul Lavoro, Rome, 1918.

DE NAVA (Giuseppe), Minister of Industry, Trade and Labour: L'assicurazione contro gli infortuni in agricoltura (*Insurance against the Accidents of Labour*). Speeches delivered in the Senate of Italy on 14, 15 and 16 July 1917. Rome, Tipografia del Senato, 1917.

By the decree-law No. 1450, dated 23 August 1917, a wish formulated by almost all the agricultural congresses held in recent years was fulfilled, for compulsory insurance against the accidents of agricultural labour was introduced into Italy. This important reform, the object of prolonged study and of many Bills, fills one of the large gaps in Italian

social legislation, in that, where provision for insurance against the accidents of labour is concerned, it places agricultural labourers on a par with industrial workers, who are under the protection of the law (consolidated text) of 31 January 1904, No. 51. It affects a mass of quite nine million workers. It is therefore important that we should describe it in its essential lines as these appear in the decree-law of 23 August 1917 and the executive regulation issued on 21 November 1918.

It must be premised that the problem of insurance against the accidents of agricultural labour in Italy was partially solved by the law we have mentioned of 31 January 1904 as to the accidents of industry, which law constituted the first step made in this branch of insurance. It did in fact provide for certain kinds of rural work, that is for those which involved the gravest dangers, either on account of their character, or of their character added to the circumstance that more than five persons were employed on them, or of the circumstance that machinery was used to execute them. In conformity with this principle there is an obligation to insure agricultural labourers in the following cases:

(*a*) when more than five of them are employed on works of land drainage, on works necessary for the prevention of avalanches and the systematization of mountain basins, on tree felling or the thinning of woods, and the transport of felled timber to the ordinary depositories on the banks of rivers and torrents or in the vicinity of cart roads, and on launching this deposited material on rivers and torrents (Article 1, No. 2);

(*b*) when more than five of them are employed on the industrial work of olive-presses, cellars, winemaking, etc., in which machines not directly propelled by the workman who uses them are employed (Article 1, No 3);

(*c*) when any number of them work on machines propelled by mechanical power or on the motors propelling such machines, the latter having an agricultural purpose (Article 1, No. 4);

(*d*) when they work on the guns and other apparatus used against hail (Article 1, No. 5).

Thus the majority of agricultural labourers are outside the guardianship of this law. The still limited use of machinery in agriculture, and the fact that in open-air work, such as is most of the work of agriculture, the employment of machines does not, according to this law, involve the obligation to insure unless these machines are propelled by mechanical power, has had the consequence that while the workers employed on agriculture are much more numerous than those employed on industry, the number of the former who come within the scope of this law is much less than that of the latter, so that "with regard to the number of workers to be protected the extension of compulsory insurance to works executed without employing machinery was a much more urgent necessity in agriculture than in manufacturing industry."

Let us add that the theory, so often advanced, not only that the pursuit of agriculture is less dangerous than that of industry, but also that the number of accidents in agriculture is so much less than that of accidents in industry that to provide for insurance against the former is not a matter

of urgency, is recognized to be entirely unfounded. Apart from the progressive increases of the machinery used on farms, which noticeably increases the number of accidents, numerous accidents are proved to occur which represent so many specific risks of agriculture for which it is necessary to provide. The Italian government therefore considered it opportune to hasten this reform, for which public opinion is now prepared, suffering it to be governed, as will be seen, by the widest criteria.

§ 1. The system of insurance.

A fundamental and characteristic principle of the new system is that the labourers it affects find themselves insured *as by right* against accidents they incur by reason of their work. This principle completes the obligation to insure with a new element which is not found in the law as to the accidents of industry and may be considered to represent an innovation even if foreign legislation be included in the range of our observation: the labourer is protected by the insurance in right of the simple fact that he is employed on agriculture or forestry, independently of any special stipulation. Thus while on the one hand the full attainment of the law's object is guaranteed, the person on whom insurance is incumbent is, on the other hand, spared all formalities relative to contracting for it — such as the withdrawal and renewal of policies, the keeping of records of payments and admissions, the declaration of alterations which have occurred in the management and the general conduct of the enterprise — which formalities, while burdensome enough for contractors and industrial employers, would have been embarassing and sometimes almost impossible for owners and farmers of small holdings.

Persons between the ages of nine and seventy-five who are entitled to insurance are: (*a*) labourers casually and permanently employed on farms and in forests, whether men or women; (*b*) landowners, *métayers* and rent-paying tenants, their wives, and their children whether legitimate or otherwise, who habitually labour on their respective holdings— foundlings in a man's regular guardianship are placed on a par with his children; (*c*) foremen employed on farms or in woods who receive average daily wages, in kind and cash, not exceeding ten liras, the year being taken to have 300 working days. By foremen are meant all persons whose duty or interest it is to exercise the function of directing or superintending work, even if they do not take a material part in it.

As regards those classes of persons occupied by works of agriculture and forestry who were affected by the law of 31 January 1904, No. 51, the provisions of this law remain in force, for it is not desired to injure the labourers it protected and for whom it provided indemnities somewhat larger than those which it is possible to pay in making a first experiment of the new system.

The age of the insured persons extends from nine to seventy-five years

in consideration of the fact that in the country work is generally begun young and ends in old age.

As we will see no difference is made for sex or age except in relation to indemnities. Labourers may be permanent or casual and the method of payment is not determined. Moreover, if labour be habitually supplied, the fact that the labourer is a small owner, or a *métayer*, or a rent-paying tenant under any one of very various contracts, does not affect his right to an indemnity This right is, moreover, not limited to owners, *métayers* and rent-paying tenants themselves, but extends to their wives and children, legitimate and illegitimate, and to foundlings. In fact the law affects comprehensively the whole labouring mass who habitually work with their hands.

. The insurance also embraces the students of institutions giving instruction in agriculture and forestry, in so far as they do work of the aforementioned kinds, either for purposes of instruction exclusively or for practical purposes, and also the members of co-operative societies managing farms and those participating in collective leases. The rise of co-operative societies of agricultural labour and collective leases, of which good examples already exist, fully justifies this extension of scope. The member of a co-operative society or the participator in a collective lease is individually neither a landowner nor a *métayer* nor an agricultural labourer. Relations with the proprietor of the soil are the business of the co-operative or the collective leasing society, in its corporate capacity. In order to avoid ambiguity the members of these societies are therefore placed on a par with landowners, *métayers* and rent-paying tenants, and their wives and children are similarly insured.

An important provision regards persons working with agricultural machines. It is provided that persons fully insured as above enjoy the benefits of insurance even if they meet with an accident while working with agricultural machines, whether these machines are being used on their own land, or the land they hold for rent or on a produce-sharing system or by emphyteusis, or whether they are working on the land of others. This provision is evidently intended to encourage the employment of agricultural machinery ; it refers only to persons who use machinery on their own account and not to those who use it for industrial purposes, and it does not affect the obligation to insure all persons employed on machinery under the law as to the accidents of industry.

According to Article 2 of the decree-law enterprises of agriculture or forestry consist of enterprises for the cultivation of lands and woods and the work appurtenant to such cultivation, such as the care of plants, irrigation, the herding, breeding and management of animals, and the preparation, preservation, conversion and transport of the products of agriculture stockfarming and forestry.

This article has therefore an extremely wide bearing. It comprises, in fact, not only the cultivation of land and woods but also accessory works of which some, such as stockbreeding and the preparation, preservation, conversion and transport of products, can be looked upon as true industries,

properly so called, connected with agriculture but having a notable independent importance. Poultryfarming, the keeping of silkworms, beekeeping and the like are specifically included. These activities are, however, within the sphere of the insurance only if they are pursued on the land of the farm or in the interest and on behalf of a farm.

Works of forestry are taken to be all works of woodland cultivation, such as planting, sowing, pruning, the barking of trees, the extirpation of noxious plants. They include the felling and thinning of trees, their transport to the places of deposit on the banks of rivers or torrents or near cart roads, and launching them from the depositories on the rivers or torrents when no more than five men on an average are habitually employed on this work. Charcoal-burning is also considered to be a work accessory to forestry.

Having noticed the persons and the undertakings who are the object of the insurance, we will pass to the benefits which the law guarantees to labourers who are the victims of accidents.

It covers all cases of accidents due to violence and occurring in the course of work if they are the occasion of (1) death, (2) complete permanent disablement, (3) partial permanent disablement reducing working capacity by more than 15 per cent., (4) complete temporary disablement entailing abstinence from work for more than ten days up to a maximum of ninety days.

The benefits assured in the case of such accidents appear from the following table:

Table of Benefits for the Accidents of Agriculture.

Age of victim	Sex	
	Male	Female
	Francs	Francs
Fatal accidents:		
from 9 to 12 years	500	500
» 12 » 15 »	1,000	750
» 15 » 23 »	2,000	1,000
» 23 » 55 »	2,500	1,250
» 55 » 75 »	1,500	750
Accidents producing complete permanent disablement:		
from 9 to 12 years	1,200	1,000
» 12 » 15 »	1,800	1,200
» 15 » 23 »	2,500	1,500
» 23 » 55 »	3,250	2,000
» 55 » 75 »	2,000	1,000
Accidents producing partial permanent disablement:	The benefit fixed for cases of complete permanent disablement is reduced in proportion to the remaining capacity for work.	

Accidents producing temporary disablement	Daily benefit	
	Male	Female
	Francs	Francs
From 12 to 15 years	0.50	0.50
» 15 » 65 »	1.00	0.75
65 » 75 »	0.75	0.50

Widows who are the heads of households are placed on a par with men in so far as regards the rate at which benefits are paid to them.

To the benefits fixed for cases of death and permanent disablement one tenth is added for the victim's wife and for each of his children under fifteen years of age until 50 per cent. is reached. Thus for men between thirty and forty-five years old who may, on the basis of the average for the kingdom, be presumed to have a wife and three children under fifteen, all living, the benefit payable may be 3,500 liras in case of death, 4,550 liras in case of permanent disablement; and if the children under fifteen years of age number four these respective benefits may even reach the sums of 3,750 liras and 4,875 liras.

The benefits are paid as capital; but they will be paid into the *Cassa Nazionale di Previdenza* (National Thrift Bank) in order to be converted into annuities if the latter amount to at least 300 liras a year.

With the introduction of fixed benefits the difficulty was overcome which depends on the fact that in the industry of agriculture and forestry true wages, properly so called, for which equivalent compensation can be paid, are not always received.

The fixed benefits are based on the presumption of uniform average wages throughout the kindgom, an easily admissible presumption since wages in the various districts do not in the agricultural industry show the same divergences as they do in the manufacturing industry. A rigid system of paying compensation in the various cases of accidents has not, however, been adopted; for, as has been seen, the benefits not only vary with the importance of the injury, but are affected by this and by other coefficients which are mutually complementary and through which the presumable total of the economic consequences of the accident are reached. These additional factors are the victim's age and the circumstances of his family. From this point of view the system determined for the case of the accidents of agriculture marks a progress on that followed in the case of industrial accidents.

Finally, the decree-law most opportunely provides that the table reproduced is subject to revision at intervals of not less than two or more than five years. Although for the accidents with which we are concerned benefits are determined on a fixed scale, and are not made equal to wages as are those for the accidents of industry, yet since it must be their object to repair economic damages consequent on the accident, namely the total or

partial loss of the earnings which previously accrued to the victim as a result of his work, it is just that they should in some measure correspond to those earnings : hence the convenience of a periodic revision. Since moreover earnings are not the same and do not vary in the same way in all parts of Italy, it is allowed that distinct tables be adopted for the various insurance districts.

§ 2. The technical and financial organization.

The cost of the insurance is entirely chargeable to the owner, the tenant by emphyteusis or the usufructory of the land. For lands which are let or granted in *métayage* or on another produce-sharing system the costs are chargeable to the owner, the tenant by emphyteusis or the usufructory, if the rent-paying tenant, *métayer* or other produce-sharing tenant habitually give his labour to the cultivation of the land. When this condition does not exist the owner, tenant by emphyteusis or usufructory will have the right to recover from the rent-paying tenant the full amount of the insurance contribution, and from the *métayer* or other produce-sharing tenant a quota of such contribution proportionate to the share of the produce of the land assigned to them, respectively, by the *métayage* or other produce-sharing contract. The rent-paying tenant or *métayer* who has repaid the insurance contribution has, in his turn, the right to recover it from the subtenant if the latter be not the direct cultivator. Whoever by directly or indirectly retaining wages causes the labourer to sustain the expense of insurance is punished by a fine not exceeding 4,000 liras.

The insurance is financed by the contributions of the persons indicated, paid as additional quotas of the Treasury tax on rural land. Such contributions are fixed, by a tariff which has 1.75 liras the hectare as its maximum limit, for every insurance district, in proportion to area, kinds of crops, the average amount of labour necessary to cultivation and the risk there may be of accidents.

The territory of the kingdom is divided into 35 districts which may comprise one or more provinces, to which *circondari* of adjacent provinces may be aggregated by reason of similarity of agriculture or greater facilities of communication. In each chief town of a district a committee is instituted, and this must fix the insurance tariffs. It consists of an official of the land-survey office, an agricultural expert, two representatives of the insuring institution and two persons subject to the obligation to insure.

The money needed for each year is determined for each district, taking into account, principally, th · probable amount of the benefits which will be payable for accidents and expenses of management. The estimate of benefits must be made by calculating the average number of agricultural labourers needed for the work and the risk of accidents as shown by the results of previous years. The payments of contributors can be established either by " tariffs by area and crops " (area of the properties, whether agricultural or woodland, and area of them under the several kinds of crops,

to be grouped as a rule, in not more than five categories) or by " tariffs by taxes " (land tax owed to the Treasury for small agricultural and forest holdings). Special additional premiums can be fixed for lands on which subsidiary, complementary or accessory work is of notable importance so that they present a particular risk of accident

When a year's balance-sheet is closed showing a deficit the ministry invites the aforesaid committee to add a suitable increment to the payments of contributors ; and the ministry has likewise the power to order a reduction of these payments when the balance-sheet is closed showing an excessive surplus. The tariffs must all be approved by the ministry, which can thus introduce into it all the variations thought to be necessary or opportune.

§ 3. The insuring institutions.

The freedom to constitute insuring institutions is not recognized, although there is provision for it in the case of insurance against the accidents of industry properly so called. The insurance is afforded on an exclusive system by a single institution in each insurance district, and all properties within the district concerned are automatically insured by such institution.

The institutions admitted to practise compulsory insurance are : the *Cassa nazionale di assicurazione per gl'infortuni degli operai sul lavoro* (National Insurance against the Accidents of Workmen during Work), the mutual societies, consortia, trade unions and other bodies which practised insurance against the accidents of agricultural labour before 26 March 1917 and which have been authorized to continue their activity, and the compulsory mutual societies. We will deal with them briefly.

All farms and forest holdings subject to the obligation to insure — with the exceptions we will presently state — are temporarily insured by the above mentioned *Cassa nazionale di assicurazione per gl'infortuni*, a public body, founded by the law of 8 July 1883, No. 1473, which possesses a vast organization and has remarkable technical competency where insurance against the accidents of agriculture is concerned.

To ensure the autonomy of this branch of insurance and the most complete power of controlling its practice, its management must be kept distinct from that of insurance against the accidents of industry and from all the other business of the *Cassa nazionale*, and further within this branch of insurance the management for single districts must be separate. Two representatives of landowners and farmers and two representatives of agricultural labourers, nominated by their respective organizations, have the right to form part of the Higher Council of the *Cassa nazionale*.

The institutions insuring against the accidents of agriculture before 26 March 1917 — the date at which the bill relative to our subject was introduced — can, whether mutual societies, consortia or trade unions, be authorized to continue their activity in determined zones bordering upon

one or more districts, and comprising the territories in which the institution concerned has been most active as regards the insured area, the number of its insurance contracts or the amount of the contributions it has received; but to obtain such an authorization the institutions must themselves present all the deeds and documents capable of proving that they have, exclusively or mainly, afforded insurance against the accidents of agricultural labour. They must further bring their rules into conformity with the provisions of the regulation and constitute the required managing committees which shall be formed of not less than nine or more than twelve members, of whom one third must be persons insured with these institutions and nominated by the competent agricultural labour organizations. Where agricultural organizations do not exist the ministry will make provision after hearing the Higher Council of Labour on the subject

Agricultural and forest holdings within the territory in which an institution is authorized to be active, as stated, are compulsorily insured by this institution, which can also afford the insurance prescribed by the law as to the accidents of industry.

If at any time the authorized institution do not work regularly the ministry may dissolve the management and nominate a royal commission, or may revoke the authorization granted.

It is interesting to note which institutions have hitherto presented the conditions (1) qualifying them to apply for permission to practise insurance against the accidents of agricultural labour.

It does not appear that, among the numerous syndicates constituted for compulsory insurance against the accidents of industry, there is any one which has practised or is practising to *a prevailing extent*, as laid down by Article 5 of the decree-law, optional insurance against the accidents of agriculture. The possibility that one of them has practised such insurance within a determined zone, and will apply for recognition or authorization within such zone, is not however to be excluded. This question will almost certainly be examined by the three powerful societies — the *Assicuratrice italiana*, the *Società Anonima Infortuni* and the *Fondiaria*, the various branches of which have had a large development throughout Italy, and which, respectively since 1903, 1905 and 1910, have afforded insurance against the accidents of agriculture.

The following institutions present the conditions required by the law in order that they may apply for authorization to insure against the accidents of agricultural labour: the *Unione interprovinciale agricola*, a limited liability co-operative society constituted at Cremona in 1907 and having insurance of this kind as its exclusive object; and the following eight mutual societies, whose years of foundation we bracket after their names — the *Cassa Mutua* of Vercelli (1902); the *Cassa Mutua dei proprietari di fondi rustici in Toscana*, having its office at Florence (1908); the *Cassa Mutua Lombarda* at Milan (1910); the *Assicurazione mutua agricola piemontese* at Turin (1910); the *Mutua Agraria Infortuni* at Bologna (1910); the *Cassa*

(1) See in this connection *Bollettino delle Assicurazioni*, Turin, Nos. 1-15 January 1918.

Mutua Romana at Rome (1914), founded on the initiative of the *Comizio Agrario*, the *Terra Italica* at Rome (1917) founded on the initiative of the *Sindacato per l'assicurazione mutua degli operai contro gli infortuni fra i tagliatori di boschi* (Syndicate for the Mutual Insurance of Workmen against Accidents Occurring to Woodcutters); and *Italia Agricola* at Rome (1917) founded on the initiative of the *Sindacato Italiano* for insurance against the accidents of industrial work.

Where special conditions of place or other circumstances require it, the constitution of mutual societies by the holdings within declared agricultural or forest zones can be declared obligatory by royal decree. These societies are instituted by a by-law issued by a provisional committee, formed of no more than eight persons chosen from those members of the Technical Committee of Agriculture who are responsible for the obligatory payment of the insurance contribution: and of them not more than four must represent the persons obliged to insure with the funds and the Itinerant Lecturers on Agriculture of the district.

From what has been said it follows that the delicate problem of the insuring institution has been solved on a criterion derived from experience. Given the grave difficulties to which the action necessitated by the system of entrusting the management of insurance to those interested, grouped in mutual associations, would have given rise, it has been thought well temporarily to entrust this management to the *Cassa Nazionale per gl'Infortuni sul Lavoro*, which has adjusted its organization, already vast and complex, to this new duty. The temporary arrangement should lead logically, as the Central Office of the Senate observed, to the formation of an opinion on the merits of the methods followed by the *Cassa Nazionale* as compared with those of the other authorized bodies. All of them are therefore obliged to present to Parliament a complete report on the results they obtain, not later than the end of the first five years after the decree-law comes into force.

§ 4. Determination and payment of benefits.

The manner in which the procedure for the payment of benefits has been regulated, with a view to guaranteeing the objective impartiality of decisions, has particular characteristics. This matter is withdrawn from the competence of the insuring institutions and entrusted in the various districts to special committees (*Comitati di liquidazione*) composed of a president, nominated by the insuring institution, a representative of the landowners and farmers and a representative of the labourers, all chosen by the ministry on the nomination of the respective class organizations. This committee provides for the payment of benefits in cases of death and of permanent disablement, whether total or partial. Benefits for temporary disablement are, on the other hand, paid by the offices of each insuring institution, in accordance with determined rules approved by the ministry.

The payment of benefits for temporary disablement must be made not

later than the twentieth day after notice has been received of the accident and continued every seven days, being paid after they fall due.

Payments for permanent disablement must be made within eight days of the ascertainment of the accident; those for deaths within five days of the ascertainment by the ministry.

The innovations introduced by the decree-law in the matter of the legal decision, when disputes arise as to benefits for accidents, are even more noteworthy. Experience has clearly shown the wisdom of assigning such disputes, on account of the nature of the interests they affect and their conspicuously technical character, not like those concerned with industrial accidents to the ordinary magistracy, but to special tribunals whose constitution allows them to attain by a rapid procedure to exact and uniform conformity with the criteria formulated by the law. There has been instituted in each insurance district an arbitrating committee composed of five members, namely a judge of the law-court, two unpaid health-officers of the insuring institution, two representatives of the persons subject to the obligation to insure, and one representative of the insured persons. To this committee will belong the settlement of all disputes as to the right to the benefit guaranteed by the law and as to the payment of the benefit and its assignment to those having a right to it.

There is appeal from the decisions of the district committee, in the case of more important disputes, to a central committee instituted in Rome in the Ministry of Industry, Trade and Labour, presided over by a counsel of the Court of Cassation, and constituted on the same principle as the district committee except that two higher officials of the Ministries of Agriculture and of Industry, Trade and Labour are added to it. From the decisions of this committee no appeal is allowed.

To prevent the abuses encountered in the case of the accidents of industry, no professional advocacy is admitted in the district arbitrating committees and in the central committee. The protection of interested persons can be entrusted to the proper *Istituti di patronato e di assistenza* which were founded for the assistance of labourers who were the victims of accidents and their heirs and assigns and which have been approved by the Ministry of Industry, Trade and Labour. Engagements to remunerate third parties for any interest they have taken in payment of indemnities are declared null, with the exception of engagements to the aforesaid *Istituti* when these have given their assistance either gratis or in return for fixed payment according to a special tariff. These *Istituti* are legally capable of taking all necessary action for the attainment of their aims.

The decree-law in question regulates, finally, another delicate point, namely the right to a revision of a benefit. This right is mainly restricted as in the existing law providing for the accidents of industry, but it is better regulated and takes into account the inconveniences to which that law has given rise. Thus it has been found that, not infrequently, benefits have no sooner been paid than the beneficiaries hasten to apply to have them revised, alleging that their physical condition has deteriorated. Not a

few even repeat such an application several times over during the two years' interval fixed by the law, knowing well that the insuring institution often ends by granting the desired increase of indemnity rather than face the expenses of revision. It is therefore provided that the request for a revision because of error in the first payment will be admitted only when the payment itself has taken place by an agreement between the two parties, and that it can be presented only once. For the other case, that of a change in the workman's physical condition, it is established that a request for a revision may be made only when a year has passed since the benefit has been paid, a certain period of time being necessary before such a physical change can show itself and can prove itself to be an effective and permanent reduction of working capacity. The eventuality of further physical deterioration, which would necessitate successive revisions, is thus excluded or rendered improbable. In any case the request for the revision must be made within two years of the day of the accident, as is established by the law in force as to the accidents of workmen during their work.

§ 5. The agricultural organizations of employers and workmen.

The decree-law gives a large measure of representation to the two classes directly interested in its application, namely landowners and farmers and labourers. As has been seen they are represented according to special rules for election and special methods of nomination, on the following:

(1) The tariffs committee — two persons subject to the obligation to insure and chosen from the landowners, *métayers* or rent-paying tenants of the district form part of it;

(2) The committee for the payment of benefits includes one representative of the farmers and one of the labourers;

(3) The higher council of the *Cassa Nazionale degl'Infortuni* includes two representatives of the farmers and two of the labourers,

(4) The managing boards of the authorized institutions are made up as to two thirds of representatives of the farmers, as to one third of representatives of the labourers:

(5) The district arbitrating committees include one representative of the farmers and one of the labourers;

(6) The central arbitrating committee includes one representative of the persons subject to the obligation to insure and one representative of the insured persons.

Thus in all departments of activity and in all the more important organs there are representatives of the two parties, and this suffices to inspire both with a sense of security as regards the equitable execution of the law.

The representatives of landowners and of labourers in the bodies we have mentioned are nominated by a vote of the employers' or labourers' organizations. To each employers' organization a vote is assigned for every three hectares within the association's competence, the maximum being

ten votes and the minimum one ; and to each labourers' organization one vote is assigned for every fifty members, the maximum being ten and the minimum one vote.

The agricultural employers' and labourers' organizations called upon to nominate their respective representatives are for each district entered in an *ad hoc* list. For such entry it is requisite : (1) that they have existed and been effectively active for at least two years ; (2) that they be composed, in the case of employers' associations, only of persons belonging to the class of landowners, rent-paying tenants or, in general, of men working farms or forest holdings, in the case of labourers' associatons of labourers employed on agricultural or forest holdings ; (3) that their regulations and the fulfilment of their programme do not restrict the individual, religious or political liberty of their members ; (4) that they do not have the character of institutions of patronage or philanthropy ; that they be supplied with regular annual receipts formed by the quotas paid by effective members and constituting on an average at least four fifths of their total annual receipts ; (6) that they be managed by boards composed of effective members ; (7) that they balance their accounts regularly and annually.

The regulation establishes rules for drawing up the lists of organizations admitted to participate in the nomination of representatives and in the procedure for such nomination.

§ 6. The cost of the insurance.

One of the most interesting enquiries is that into the cost of the insurance. According to calculations made by the Ministry of Industry, Trade and Labour (1), the sum required for the insurance, that is the sum which should constitute the total charge on agricultural and forest land in Italy in 1919 for insurance, is 15,013,098 liras, distributed as follows among districts :

Piedmont	1,831,010	liras
Liguria	304,374	»
Lombardy	1,720,688	»
Venetia	1,729,140	»
Emilia	1,258,450	»
Tuscany	1,114,864	»
Marche	555,145	»
Umbria	361,069	»
Carried forward . . .	8,874,740	

(1) See the circular of 24 September 1918 of this ministry (General Direction of Labour and Social Thrift) to the financial offices and taxing agencies, which contains instructions for the compilation of rolls of contributors to compulsory insurance against the accidents of agriculture

Brought forward . . .	8,874,740	
Latium	441,339	liras
Abruzzi and Molise	768,309	»
Campania	1,176,570	»
Apulia	953,993	»
Basilicata	264,042	»
Calabria	733,232	»
Sicily	1,361,221	»
Sardinia	439,652	»
Total . . .	15,013,098	»

The sum required, as stated, must be distributed among all the properties of the province entered on the land taxation rolls.

From calculations of the same ministry it appears that the sum required for insurance which falls as a charge on one hectare of land ranges from a minimum of 0.75 lira (province of Naples) to a maximum of 5.66 liras (province of Campobasso), as follows:

Province in which the sum thus falling on one hectare of agricultural or forest land is calculated to be less than a lira — Naples (0.75 lira).

Provinces in which it is between 1 and 2 liras: Cremona (1.04), Rome (1.08), Mantua (1.11) Milan (1.25), Perugia (1.32), Macerata (1.37), Modena (1.48), Verona (1.51), Reggio Emilia (1.52), Brescia (1.59), Pesaro and Urbino (1.82), Cuneo (1.83), Ancona (1.91), Turin (1.93), Vicenza (1.93).

Provinces in which it is between 2 and 3 liras: Ascoli Piceno (2.05), Palermo (2.07), Padua (2.10), Cagliari (2.25), Piacenza (2,27), Avellino (2.46), Bergamo (2.47), Benevento (2.47), Syracuse (2.64), Girgenti (2.72). Caserta (2.74), Como (2.76), Foggia (2.80), Livorno (2.85), Lecce (2.87), Caltanissetta (2.89), Bari (2.89), Catania (2.91), Massa and Carrara (2.92), Pisa (3).

Provinces in which it is between 3 and 4 liras: Florence (3.02), Arezzo (3.07), Siena (3.08), Parma (3.08), Treviso (3.10), Lucca (3.13), Sassari (3.14), Trapani (3.40), Rovigo (3.43), Potenza (3.51), Messina (3.56), Catanzaro (3.91) Grosseto (3.92), Aquila (3.96).

Provinces in which it is between 4 and 5 liras: Salerno (4.36), Reggio Calabria (4.54), Teramo (4.70), Venice (4.80).

Provinces in which it is more than 5 liras the hectare: Chieti (5.12), Cosenza (5.22), Campobasso (5.66).

The total charge thus falling on landed property is not heavy, and for single properties it is negligible as compared with other items of farming costs.

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Such are the general lines of the new Italian law providing for the accidents of agriculture. It does not contain a final answer to all the various

and delicate questions which make up the problem of the insurance of agricultural labourers. On the contrary, the intention has been to give an essentially experimental character to the measure; and it is provided that within five years of the date at which it comes into force a report on the results obtained by applying it, together with proposals for amendments which may seem advisable, will be presented to Parliament by the care of the Ministry of Industry, Trade and Labour. It will thus be possible to make the whole system of this insurance adequate to the needs which may be made apparent by the actual results of its working.

Part III: Credit

CANADA.

THE ORGANIZATION OF RURAL CREDIT.

OFFICIAL SOURCE:

THE AGRICULTURAL GAZETTE OF CANADA. Ottawa, August 1918.

The question of rural credit has attracted much attention in Canada in recent years. A number of Acts bearing on it have been passed by the different provincial legislatures, and most of them have been successfully applied. The Federal Department of Agriculture has brought together in the *Agricultural Gazette of Canada* a series of notices showing the present state of rural credit in each province. On the basis of these we will briefly show how rural credit is organized and how it has developed in the various provinces.

§ 1. RURAL CREDIT IN NOVA SCOTIA.

The legislature of Nova Scotia passed in 1912 an Act for the Encouragement of Settlers on Farm Lands with the object of affording means and encouragement to settlers to buy farm holdings for themselves. The primary intention was to serve newcomers, but the benefits of the measure have been available for farmers born in the province who have wished to buy land or to effect improvements on their farms.

By the terms of the Act the government does not grant money directly to the applicant for a loan. Arrangements have been made with an established lending company which advances to the farmer 40 per cent. of the appraised value of the property he wishes to buy or improve. In approved cases and to thoroughly experienced farmers the government guarantees, if necessary, an additional advance of 40 per cent., making the company's total advance 80 per cent. The applicant must possess cash to the value of at least 20 per cent. of the value of the farm, in addition to what he requires for house furnishing, stock, implements, and the maintenance of himself and his family. The lending company takes a mortgage on the property.

A farmer who wishes for an advance under this Act applies to the Department of Industries and Immigration. His property or the property he wishes to buy is then inspected and a value placed on it by this department's farm inspector, and it is also inspected and valued by the land valuer of the lending company.

Farms on which loans are granted are inspected from time to time by the inspector of the department who is empowered to issue instructions for the guidance of the borrower. The mortgagee must manure and manage and generally farm his land in an efficient manner and follow such methods of husbandry as will keep the land in a good state. He must repair and keep in repair all the buildings, fences, hedges and walls on the farm and must not allow any noxious weeds to run to seed. He must keep his farm well and properly stocked, and, so far as is possible, all hay, grain and root crops on the farm must be consumed by the stock on it. In the event of his selling any of these products the farmer must return to the land either barnyard manure or commercial fertilizer of a value equal to two thirds of the value as manure of the products sold.

The mortgage makes repayments by the amortization method. The mortgages negotiated by the Department of Industries and Immigration are for a definite number of years, agreed upon, but may be paid off at any time during that period. The company cannot, however, call in a mortgage until the end of the term, provided the borrower pay his instalments with reasonable promptness. It may be difficult for a man to pay much on account of principal during the first years of his tenure of a farm. This fact is taken into consideration: in order to help the farmer to establish himself well the government and lending company may agree to a release of payments for a period not exceeding five years.

Altogether 187 applications for advances have been made and 70 of them have been granted. To secure its loans the lending company has taken mortgages on buildings valued at $94,850 and on 11,079 acres of land valued at $121,658. The total loans granted amounted to $129,765, of which sum the government guaranteed $56,825. The total valuation of the property given as security was $216,508. Applications were rejected for various reasons, including defective title, insufficient security and unfitness of the applicant. The terms of the mortgages ranged from six to fifteen years, and interest on them from 6 to 7 per cent. according to the condition of the money market. The purposes for which loans were granted included not only the purchase of land but also drainage, the clearing of additional land, the purchase of stock and implements, the erection of suitable fencing and outbuildings, and other improvements.

§ 2. Rural credit in New Brunswick.

The yearly decrease in the rural population, the large number of abandoned or semi-abandoned farms, the steady increase in the importation of foodstuffs, and the insistent call for capital by men willing to till the soil

induced the government to pass the Act to Encourage the Settlement of Farm Lands. This provides for a bond issue and for the appointment of a board of three to administer the fund, choose farms for purchase, and resell them to *bona fide* settlers. All transactions are in the name of the board.

A bond issue of $100,000 was made to run for a period of twenty years; $5,000 are set aside yearly from the current revenues to meet the principal when it falls due. Farms can be bought by the board and resold at cost upon the following conditions: "Twenty-five per centum of the purchase money, if the price being paid for the property is less than one thousand dollars, but, if in excess of that sum, then an initial payment of thirty-five per cent., to be paid when possession is given to the purchaser, and the balance, with interest at five per cent. thereon, at such stated periods as the said board may agree upon with the purchaser; the final payment to be made at a date not exceeding ten years from the date of the agreement to purchase, except that in special cases an extension of two years may be given by unanimous consent of the board."

Farms suitable for settlement with every obtainable detail concerning them are catalogued, and anyone who has no preference with regard to situation is helped to make his choice. As soon as a settler decides upon a property the inspector, who is a member of the board, inspects it carefully, and reports on it to the board, with a recommendation as to value, etc. If the report be satisfactory the property is bought by the board and resold to the settler on the terms laid down in the Act. The board retains the title-deed and the purchaser holds a deed of agreement granted by the board, until the purchaser has paid by yearly instalments the debt he has incurred, when a transfer of the property is made.

Many young men in the province wish to secure properties near their relatives. In such cases they may choose the nearest vacant farm suitable to their purpose and apply to the board for assistance. The regular procedure is followed and such men are nearly always helped. Large numbers of them would otherwise move to other parts.

Incoming settlers who deal with the board are protected from buying land on which to settle in out-of-the-way places. Many districts in which there once was a good number of settlers have been abandoned because of their unsuitability to agriculture or lack of means of transport, or because the industry incidental to lumbering or mining has ceased to exist on them. The urgent need for foodstuffs induced many persons to clear and cultivate land near such points. Speculation in land is also eliminated. The early settlers cleared much high and very rolling land which should have remained under timber — such farms should be left vacant and reforested.

Should any purchaser fail to make the agreed payments the board may dispossess him and arrange for another settler. When, however, such failure is due to unfavourable circumstances the defaulter receives all consideration and assistance. But when it appears to be the result of wilful

negligence or endeavour to defraud, the farm is immediately taken over by the board.

The Act was passed in 1912. Since this date 345 farms have been bought and 333 have been resold for $275,644, which sum also represents the purchase price. The purchasers have repaid $130,600.74 by instalments. In nearly every case the loan assists the purchase of the land.

§ 3. Rural credit in Quebec.

Although as yet there are, properly speaking, no rural credit associations like those of the west in the province of Quebec, there are a large number of *Caisses Populaires* (credit banks) which are real institutions of savings and credit and open to the agricultural and manufacturing classes.

Such banks were organized under the Quebec Syndicates Act, 1906. (Revised Statutes, Quebec, 1909, amended by 1 Geo. V, 2nd session, and 5 Geo. V).

The object of association is defined as follows by the statute.

"The object of the association shall be to study, protect and defend the economic interests of the labouring classes. For that purpose it may buy for resale to the associates only, such articles as are necessary for the support of life, or for the works of their industry; open up credits for them and make loans to them, establish works in common for the associates, or allow them to devote themselves to processes of production, and to sell the products thereof, either collectively or individually."

No one but the members can do business with the association, The shares must not be less than a dollar each, usually they are $5. There is a limit to the number of shares which may be bought by a shareholder but this number is considerable.

Not a cent is contributed to the funds of these banks by any municipal council or by government.

The loans are made on the security of a first mortgage when the amount is considerable, or on a promissory note when it is comparatively small. Repayments of capital and interest are made monthly.

Profits are divided between the shareholders in the form of a dividend at the end of the association's year, at least 10 per cent. of the total amount of profits being first deducted to make a collective credit to cover possible losses. Dividends paid to shareholders vary from 3½ to 7 per cent of the capital they have subscribed; and the interest paid to depositors from 3 to 4 per cent. of their savings.

Since 1915 these banks have been obliged to prepare at the end of the fiscal year a statement in three copies of their operations: one copy is handed to the secretary of the province and one to the office of the clerk or of the secretary-treasurer of the municipality, while the third is kept in the office of the association. The correctness of these statements is certified

under oath by the manager before a justice of the peace, and this is the extent of the supervision exercised by the government.

The following figures regarding the popular banks refer to 1916 :

Number of banks reporting	94 (1)
Number of members	25,028
Number of depositors	15,613
Number of loans agreed to	11,200
Amount of loans made	$1,641,258
Total profits accumulated	$ 100,945

In 1916 the operations of the banks amounted to $5,534,246.44, divided as follows among receipts and expenditure :

Receipts.

Cash in hand on first day of year	$ 326,176.09
Social capital	118,195.56
Admission taxes	3,088.68
Savings	3,543,462.76
Loans postponed	1,423,445.01
Profits	119,878.34
	$ 5,534,246.44

Expenditure.

Share capital paid up	$ 61,733.40
Savings refunded	3,142,982.14
Loans outstanding	1,771,247.38
General expenditure	16,230.06
Dividends	31,562.50
Interest on savings	32,026.50
Cash in hand on last day of year	478,464 46
	$ 5,534,246.44

In the previous year the transactions of the banks amounted to $4,490,953.41, so that the increase was $1,043,293.03 in 1916. This is conclusive evidence of the development and usefulness of these financial institutions.

Out of 11,201 loans made during 1916 of amounts mostly under $1,000 the loans of sums between $100 and $200 were most numerous.

(1) In 1916 six *caisses populaires* did not report.

There were 579 loans between $5 and $10 in amount, 725 between $20 and $25; 875 between $40 and $50; 1,620 between $100 and $200; 118 between $500 and $600, and 85 between $900 and $1000.

Out of the 100 banks existing in 1916, 19 were in the cities — 4 of them in Montreal and 5 in Quebec — and 81 in the towns. A few others were established in 1917

§ 4. Rural credit in Ontario.

The provincial legislature of Ontario passed during its 1916 session an Act authorizing loans to settlers in the northern and north-western district of the province.

The maximum amount which may be lent to any settler was fixed at $500, interest to be at the rate of 6 per cent. per annum, and terms and conditions as the Loan Commissioner might think proper.

Any loan made is registered against the land, in the Department of Lands, Forest and Mines in the case of unpatented lands, and in the Property Registry or Land Titles Office in the case of patented lands. It constitutes a lien on the land.

Settlers desiring to obtain a loan should call on the Crown Lands Agent of their district, at whose office they can fill up an application form, giving details as to the situation of the lot in question, the amount of the loan they want, the period for which they want it, and the proposed terms of repayment. Interest is payable annually. Full information must be given as to the purpose for which the loan is required; for the intention of the government is to help legitimate settlers to make further improvements — erect buildings, buy live stock and farm implements, clear land, etc. — and it is a condition of the granting of the loans that the money be spent on the specific purpose set out in the application unless the Loan Commissioner give his consent in writing to any change in this purpose.

The application form also provides for detailed information as to the number of acres of land cultivated, the number ready for cultivation, the number on which timber has been chopped or burnt, the total number of acres of arable land and of standing timber, the class or kind of the timber, the dimensions and material of buildings, and the amount of the live stock and farming implements held.

The total sum lent on the conditions thus outlined up to 31 October 1917 was $300,000; the number of loans made was 1,167 and the average amount of a loan $257. The applications were for loans ranging in amount from $50 to $500.

In 1917 the Farm Loan Act was passed. This measure authorizes the provincial treasurer to lend money to a township corporation against debentures of the township, and thus to enable the corporation to make loans to farmers, principally for the purpose of permanent improvements.

§ 5. Rural credit in Manitoba.

In this review we have already twice noticed (1) the success which has attended the application of the Rural Credits Act, passed by the Manitoba legislature in 1917. We will now give some more detailed information as to this Act.

It provides for the organization by Manitoba farmers of Rural Credit Societies, which enable their individual shareholders to obtain short-term loans for the purpose of carrying on or extending their farming operations. The security for a loan is the crops produced by use of the money lent or the live stock or machinery bought therewith. The money is lent by the bank to the societies at 6 per cent. and the individual borrower is charged 7 per cent., the difference going to pay the expenses of the society and increase the guarantee fund.

Each member of a society must take stock up to the amount of $ 100 and his liability is limited to that amount. The provincial government takes an amount of stock equal to half that subscribed by the members of the society, and the municipality within the boundaries of which the members of the society live and farm also takes this amount of stock. The proceeds of this stock form a guarantee fund which is the basis for credit, and the society will be enabled to secure credits for individual members amounting to many times the total amount of the subscribed stock. It is provided that the municipal subscription need not be in actual cash but may be in bonds of the municipality. With a capital of $10,000 accruing from the subscriptions of $100 each of fifty farmers, and from half the amount of these subscriptions subscribed both by the provincial government and by the municipality, the society becoming responsible for each loan made to its members, it is calculated that loans totalling at least $100,000 could be secured from the bank or banks with which it is arranged that the society do business.

The Act provides that when at least fifteen farmers in any district have decided to organize a Rural Credit Society, they shall apply by petition to the provincial secretary for permission to be incorporated. The government will then appoint an officer to act as secretary and treasurer of the society until its organization has been completed and a permanent secretary and treasurer can be appointed. No society can begin business until it has received subscriptions from not less than fifty persons who are actually engaged in farming or have agreed to engage within one year in farming operations, and these must subscribe for stock to the amount of not less than $5,000 of which not less than 10 per cent. must be paid up. When the organization of the society is complete the management is vested in a board of nine directors, of whom three are elected by the members of the society, three are named by the municipality and three are appointed by

(1) See our issues for September 1918, page 720, and November-December 1918, page 908.

the government of Manitoba. The last-named must include a graduate in agriculture who becomes government supervisor of agriculture in the district. One of the directors is to act as secretary and must be a capable accountant. He will be the only officer paid by the society. The Act provides that the loans shall be for the purchase of seed, fodder or other supplies, of implements or machinery, and of live stock, and for payment of the cost of carrying on farming, ranching and other like operations and of preparing land for cultivation.

The Credit Society is also authorized to act as agent for its members in buying supplies and selling products, and it may take steps to promote co-operation for the improvement of the conditions of farm life and to extend the scope of the society's activities to include all residents in the district.

Notes covering loans will mature not later than 31 December of the year in which the loans are made. If the loans cannot reasonably be realized by that date they may be renewed.

All municipal, provincial or school buildings may be used by any society for any meeting, free of charge.

§ 6. Rural credit in Alberta.

Three Acts were passed in 1917 to secure funds for agricultural purposes. The first is called " An Act to encourage the increased raising of stock in the province of Alberta " and commonly known as the " Cow Bill ". It is administered under the Live Stock Commissioner's office. It provides for the establishing of co-operative borrowing associations of five or more farmers, each of whom may borrow amounts up to a maximum of $500 in order to buy stock, the amount borrowed and the stock purchased being subject to the approval of the commissioner. The stock must consist of cows and heifers but provision is made for the joint purchase of registered bulls. A dollar fee is collected from each member for every $100 he borrows. The interest must not exceed 6 per cent. The money is obtained from the banks and repayment is guaranteed by the government. The sale of stock and its offspring is subject to the approval of the commissioner. No female stock may be sold. A loan is for a period of five years but may be repaid during that time. The government guaranteed over half a million dollars to 1200 borrowers under this Act in 1917.

The second Act is called " An Act respecting co-operative credit ". It authorizes the formation of co-operative credit societies to lend money on joint municipal and government guarantee. Such a credit association has eight directors, four named by the orgnization's meeting, two by the Lieutenant-Governor-in-Council and two by the municipality giving the guarantee. The purposes for which money is lent by a society include the following :

" (*a*) To procure short term loans for its members for paying the cost

of farming operations of all kinds and increasing the production of farm products and particularly for the following purposes :

" (1) The purchase of seed, feed and other farm supplies ,

" (2) The purchase of implements and machinery ;

" (3) The purchase of cows, horses, sheep and other live stock ;

" (4) The payment of the cost of carrying on any farming, ranching, stock-raising, dairying or other like operations ;

" (5) The payment of the cost of preparing for cultivation.

" (*b*) To act as agent for the members in purchasing goods, chattels, effects, stock, grain, coal, wood, lumber, merchandise, or any other article or commodity required by subscribers and in selling any products produced by subscribers ;

" (*c*) To promote co-operation among its members for the improvement of conditions of farm life. "

The third Act is called " An Act to foster and encourage agricultural development by means of standard forms of investment upon farm mortgages and the equalization of rates of interest. " It enables the holders of land to secure through the government long-term loans at low rates of interest and extending over a period of thirty years, repayments being made annually on the amortization plan. This Act is administered by the Commissioner of Farm Loans and a body called the Alberta Farm Loan Board. For the present it is practically dormant and will continue so until the return of peace conditions.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

UNITED STATES.

FARM LOANS MADE BY FEDERAL LAND BANKS UP TO 31 DECEMBER 1918. — *The Economic World* New York, 25 January 1919.

On 1 January 1919 the grand total of all the mortgage loans concluded by the Land Banks since the establishment of the Federal Farm Loan system was $157,020,751. The applications for loans had however been for a far larger sum, namely $425,741,722, and had numbered 167,966. In December 1918 the number of applications was 5,672 and they were for $19,199,613 : in that month 4,251 loans amounting to $15,014,773 were approved.

The following table shows the amount of money lent by the several Federal Land Banks during the twenty-one months which ended on 31 December 1918 :

Land Bank :		
Spokane	$	24,531,715
St Paul	»	22,555,400
Omaha	»	16,859,640
Wichita	»	16,358,100
Houston	»	15,202,546
New Orleans	»	11,356,915
St. Louis	»	10,829,450
Louisville	»	10,111,000
Berkeley	»	9,573,600
Columbia, S. C.	»	7,795,850
Baltimore	»	6,129,450
Springfield, Mass.	»	5,681,045
Total	$	157,020,751

The fact that farmers who borrow from the Land Banks meet their obligations punctually is proved by a statement that of the $4,644,000 due up to 1 January 1919 as interest and amortization payments on outstanding mortgage loans, only $83,000 or 1.8 per cent. had not been paid on the right date, and only $11,000 were more than ninety days overdue.

Part IV: Agricultural Economy in General

SPAIN.

THE PROBLEM OF FORESTRY AND OFFICIAL ACTION.

OFFICIAL SOURCES:

LEY RELATIVA A LA CONSERVACION Y FOMENTO DE LA RIQUEZA FORESTAL (*Law as to the Conservation and Improvement of Forest Wealth*). Gaceta de Madrid. Madrid, 28 July 1918.

REGLAMENTO DE LA LEY SOBRE LA CONSERVACION Y FOMENTO DE LA RIQUEZA FORESTAL (*Regulation as to the Law on the Conservation and Improvement of Forest Wealth*). Gaceta de Madrid. Madrid, 5 September 1918.

REAL DECRETO AUTORIZANDO AL MINISTRO DE FOMENTO PARA QUE PRESENTE UN PROYECTO DE LEY RELATIVO AL FOMENTO DE LA RIQUEZA FORESTAL DE ESPAÑA (*Royal Decree authorizing the Minister of Fomento to present a Bill as to the Improvement of the Forest Wealth of Spain*). Gaceta de Madrid. Madrid, 18 July 1918.

LEY DISPONIENDO SE CONSIDEREN COMO DE INTERÉS GENERAL Y DE UTILIDAD PÚBLICA, ADEMÁS DE LOS CATALOGADOS, LOS MONTES Y TERRENOS QUE DEBAN REPOBLARSE FORESTALMENTE, SIEMPRE QUE SE HALLEN EN UNO DE LOS CASOS QUE ESTA LEY EXPRESA (*Law providing that in addition to those already registered as such, woods and lands which are to be reforested shall, in certain stated cases, be considered to be of general interest and public usefulness*). Gaceta de Madrid, Madrid, 26 June 1918.

LEY DE MONTES DE 24 DE MAYO DE 1863 (*Law of 24 May 1863 as to Woods*). Gaceta de Madrid. Madrid, 28 May 1863.

ANUARIO ESTADÍSTICO DE ESPAÑA. AÑO III 1916. Ministerio de Instrucción pública y Bellas Artes (*Statistical Yearbook of Spain. 3rd year, 1916. Ministry of Public Education and the Fine Arts*). Madrid, 1917.

RESEÑA GEOGRÁFICA Y ESTADÍSTICA DE ESPAÑA. TOMOS I, II Y III. Dirección del Instituto Geográfico y Estadístico (*Geographical and Statistical Review of Spain. Vols. I, II and III Direction of the Institute of Geography and Statistics*). Madrid, 1912 and 1914.

ANUARIO ESTADÍSTICO DE ESPAÑA, 1862-1865. Junta general de Estadística (*Statistical Yearbook of Spain, 1862-1865. General Committee of Statistics*). Madrid, 1866-1867.

OTHER PUBLICATIONS:

EZA (Visconde de): El problema agrario en España (*The Agricultural Problem in Spain*). Imprenta de Bernardo Rodríguez. Madrid, 1915.

SARDÁ (Juan): El regadío en Cataluña (*Irrigation in Catalonia*). Tip. El Anuario. Barcelona, 1913.

MEDINA Y MARAÑÓN: Leyes administrativas de España (*Administrative Laws of Spain*). Establecimiento tip. de la Viuda e Hijos de Tello, Madrid, 1907.

EL REGADÍO EN ESPAÑA. Ministerio de Agricultura, Industria, Comercio y Obras públicas (*Irrigation in Spain. Ministry of Agriculture, Industry, Trade and Public Works*). Tip. de los Hijos de M. G. Hernández, Madrid, 1904.

§ 1. Introduction.

In describing the land of Spain the *Reseña geográfica y estadística*, published by the *Instituto geográfico y estadístico* of Madrid, expresses itself as follows: " The diminution of our former forest wealth goes on very rapidly. From year to year we see lands once wooded laid waste. Life flees from them; rain becomes rarer and rarer; the sierras show their stripped skeleton of bare rock; and large parts of our land are on the way to become deserts. The forests which in times past covered the summits of our sierras have been completely rased to the ground, and the miserable woods which are all that is left of them will disappear within very few years if the prevailing hatred of trees does not soon cease to make itself felt so untiringly. " Such is indeed the position of Spanish forestry, a position which would be enough in itself to attract the attention of the public authorities. But in order to have an exact idea of the importance which the problem of forestry assumes in Spain it is necessary to consider it in relation with the special conditions reigning in Spanish territory. We should recall that the land of Spain has, next to that of Switzerland, the most varied surface in Europe, having six mountain systems (1); that the composition of the soil makes it largely sterile or slightly productive, so that even steppes exist in Spain. These are areas incapable of being irrigated and therefore impervious to all agriculture, which can be used only as pastureland or can at most be planted with the *Pinus halepensis*. They cover as much as 3,500,000 hectares (2). Finally the climate of Spain is characterized by extreme inequality and sudden changes of temperature, so that in some districts there is an average difference of more than 60° (between —10° and +43° in the province of Burgos) between the monthly isomerics and isotherals. There is the same inequality in the degree of humidity.

Besides the temperate valley there is the mountain-top crowned with perpetual snow; beside the fertile plain the bared rocky slope and the desolate steppe; and all around the fine cultivated fields of Murcia and Valencia there are the valleys where the floods collect which lay the crops waste.

(1) These systems are the northern system (108 to 2,453 metres), the Iberian system (220 to 2,315 metres), the central system (655 to 2,560 metres), that of the mountains of Toledo (404 to 1490 metres,, the Betic system (113 to 1299 metres), and the Penibetic system (410 to 3,481 metres).

(2) The publication already mentioned of the *Instituto Geográfico y Estadístico* reproduces the following figures, those of Engineer Maliadas, as to the distribution of the Spanish soil:

(1) Rocks entirely bare	10 per cent.
(2) Very slightly productive lands	35 per cent.
(3) Lands of average productivity	45 per cent.
(4) Favoured and very productive lands	10 per cent.

The *Junta Consultiva Agronómica* distributes the 50,451,688 hectares which make up the area of Spain as follows: cultivated area 21,702,880 hectares; forests and pasture lands 24,055,547 hectares; area not admitting of cultivation 4,693,261 hectares. We would recall, finally, that in Europe there are steppes only in Russia, Hungary and Spain.

Such are the quite special conditions of the land of Spain which give rise to the present position of the country with regard to cultivation and production.

According to official calculations there are at present, out of the 50,000,000 hectares which, in round figures, constitute the territory of the country, only 21,500,000 hectares or 43 per cent. given up to agriculture. Experts agree unanimously that, given the conditions of which we have spoken, it would be very difficult to till more than half the land of Spain, and therefore there will always be some 25,000,000 hectares which can be used only for forestry. If it be considered that the total area of adequately planted public and private woods does not now exceed some 5,000,000 hectares, it will be seen that, although the area occupied by towns and villages and by watercourses, public roads, etc. is estimated at four or five million hectares, there still remain from fifteen to sixteen million hectares of Spanish territory, or more than a quarter of the whole, which are unproductive or form wretched pasturelands and which are economically fitted only to be used as woodland.

It is therefore clear that the problem of forestry has in Spain an importance of the first rank.

§ 2. Forest wealth and the emancipation of land settled or held in mortmain.

The essential features of the history of forestry in Spain are, according to the most authoritative opinions, the excessive destruction of forests and the postponement of the reaction in their favour, in spite of the fact that, as we have said, a large part of Spanish territory must either be afforested or else remain uncultivated. Among the causes determining deforestation must be recognized the seriously mistaken principle on which property settled or held in mortmain was emancipated in order that the public woods might pass into private ownership. We will notice the influence which the emancipation of property settled or held in mortmain has had on the present situation, rapidly tracing such property back to its origin.

Causes which varied with periods had concentrated rural and urban property in the hands of a small number of landowners. Property was condemned to perpetual immobility. So much was this the case that at the end of the eighteenth century hardly a third of Spanish territory was free from family settlements. The better and the more important share of landed property was out of the market, without fluidity, condemned to be the perpetual possession of certain families and corporations and inac-

(1) In Denmark 67.5 per cent. of the land is cultivated, in Italy 62.7 per cent., in Belgium 53.5 per cent., in France 53.3 per cent.

(2) As regards legislation as to the emancipation of property settled or held in mortmain and its antecedents, see the article "The Distribution of Rural Property and Land Settlement in their Relation to the Agrarian Problem" in our issue for May and July 1916.

(3) See the article already cited.

cessible to everyone else. The evil became so great and its influence for the impoverishment of the country so manifest that public opinion began to revolt against it. This brought about a reaction which succeeded in obtaining first, in 1879, a royal decree for the sale of almost all the properties of charitable institutions, confraternities, religious bodies, and lay charities. The reaction then received a yet more vigorous impulse from the members of the legislative assembly of the States of Cadiz who granted that feudal lordships might be suppressed and ruined or suppressed convents and other propertes alienated. This public reaction, more or less impeded by the great political vicissitudes through which Spain was passing at the time, attained to the complete fulfilment of the hopes entertained for it in 1855 when the emancipation of land settled or held in mortmain became an accomplished fact.

For the States of the Constituent Assembly of 1854 authorized the redemption of charges and ancient rights and dues. They restored to the scope of the vivifying force of private interest all that had belonged to the immense mass of properties held in mortmain. It could not however escape the attention of the legislators that certain of these properties were of such a nature that private interest, left to itself, was not fitted to improve and preserve them. Therefore the decree for the sale of the woods comprised in the properties to be emanicipated, established (article 2, § 6 of the law of 1 May 1855) that neither forests nor woods of which the government thought the sale inadvisable would be alienated, and the common pasture lands intended for the live stock of villages were soon afterwards similarly reserved.

In order to understand the importance of these exceptions it is necessary to know that in 1855, after the two emanicipations of land settled or held in mortmain which had been completed in 1821-23 and 1833-49, and in the course of which property worth 4,000,000,000 *reals* (1) and comprising much woodland had been sold, there were still 12,500,000 hectares of public woods in Spain.

In order to put into practice the exception made by the law of 1855, the government asked for the opinion of the *Junta facultativa de Montes*. This body, considering Spanish territory as divided into distinct forest districts, pointed out a scientific principle for the determination of the woods in each district which ought to benefit by the exception and remain public. The inadequate number of the expert staff which would thus have determined the woods scientifically, and the shortness of the time available for ascertaining which woods could be sold in order to increase the resources of the Treasury, caused however a practical principle, on which the woods could be classified easily and rapidly, to be preferred. Thus for many years there was in Spain no criterion for excepting public woods from sales saving the fact that they consisted of beeches or of the various species belonging to the genera *Pinus* and *Quercus* (2). This rule, based on a profound

(1) Money unit of the time, equal to about 25 céntimos.

(2) Article 2 of the law of 24 May 1863.

knowledge of the botanic geography of Spain, allowed the government schemes to be supported without any serious compromising of the forest wealth of the country, but brought about that many woodlands which should have retained a public character passed into the hands of individuals. Thus when in 1896 the principle was put into practice of excepting forests from sale because of their influence on watercourses, because they kept land from crumbling, for reasons of health, etc., and thus of considering them as having a public usefulness, it had come about that, in virtue of the emancipation, many properties which were in the conditions qualifying them to be excepted from sale had passed into private ownership at the time when it had been possible to sell them because they did not include trees of the kinds mentioned.

§ 3. Present position of the woods of Spain.

Before giving some statistical data as to the forest wealth of Spain we must, in order that these data may be better understood, show the classifications and subclassifications which have been made of the woods constituting this wealth. We would note that the data which it is our intention to give refer only to public woods, for since in Spain the general land-valuation has not yet been completed there are no official data as to the woods in private ownership (1).

In consequence of the revision ordered by the law of 30 August 1896 the public woods were divided into two large groups, namely one formed by woods in the class of those excepted for reasons of public utility from the emancipation of land settled or held in mortmain, a class formed by applying the royal decree of 27 February 1897, and another comprising all woods which had not this character. The woods included in this second group may belong to the State or the communes. They are, in accordance with their characteristics, woods giving pasturage to cattle, woods forming commons, and woods which can be alienated, and they depend on the Ministry of Finances. The woods of the first group, those having a public usefulness, depend on the Ministry of the *Fomento* and are entrusted to the department of forests in that ministry.. They are in their turn divided, according to their ownership, into woods of the State, of the communes and of public establishments.

As regards the uses to which they are put, all the public utility woods are divided into three groups, in accordance with whether they are managed as forest districts and subject to inspections of the ordinary department, whether they are undergoing organization or whether they are being reforested.

Now that we have explained the division of public woods in general we will turn to the woods of the first group established, that of the public

(1) It is believed that in Spain the woods in private ownership form about two thirds of all the woods in the country

utility woods. Their content of forest wealth, according to the method or system of dealing with them, is as follows (1).

System of dealing with woods or department on which they depend	Woods belonging to the State		to the communes		to public establishments		Total	
	number	hectares	number	hectares	number	hectares	number	hectares
Districts	224	165,269	7,075	4 300,607	18	3,032	7,317	4,468,908
Inspection of organization	34	61,371	303	264,931	2	3,248	339	329,550
Inspection of reforestation	486	16,630	66	97,687	—	—	552	114,317
Total	744	243,770	7,444	4,562,225	20	6,280	8,208	4,912,775

The forest wealth utilized is distributed as follows according to its kind :

	hectares	Percentage of forest area
High Forest	2,117,243	42.6
Coppice	1,252,368	25.9
Thickets and pasturage	1,447,779	31.5

The extent to which the forest area is utilized for various purposes appears from the following figures :

	hectares	Percentage of forest area
Timber	66,234	1.3
Firewood	376,193	7.6
Pasturage	3,641,759	74.1
Oak groves (pasturing pigs)	98,157	1.9
Esparto grass	118,991	2.4
Resin	93,276	1.9
Bark	16,124	0.3
Fruit	109,251	0.2
Sand and stones	13,671	0.2
Other products	534,088	10.8

To complete the data referring to public utility woods we give figures as to the yield in cash obtained from them and the estimate of the forest products consumed during the forest year.

(1) These data and those which follow are borrowed from the *Reseña geográfica y estadística de España* and refer to the year 1912.

Utilization	Yield in pesetas			
	in cash	in kind	Destruction	Total
Ordinary.	4,914,470.06	3,455.90	—	4,917,925.96
In conformity with customs of neighbourhood	415,267.04	3,815,688.24	—	4,230,955.28
Trees blown down	82,340.29	12,769.44	—	95,109.73
Trees destroyed by fire. . .	90,435.67	64 00	114,251.50	204.731.17
Trees fraududenty utilized .	94,986.44	107,382.80	196,639.57	399,008.81
Total . . .	5,597,499.50	3,939,380.38	310,871 07	9,847,750.95

The following are, finally, the official data referring to woods having a public character but having no public usefulness and depending on the Ministry of Finances.

		Number of woods	Content hectares	Valuation pesetas
State woods		92	47,509	4,823,422
Woods of communes	Alienable woods	4,446	759,341	93,961,058
	Pasturage of cattle	1,063	246,257	30,691,235
	Commons.	1,044	403,736	50,493,020
	Examined and not classified .	2,083	165,243	21,305,975
	Total . . .	8,728	1,622,086	201,274,710

Having examined the present situation of the woods we will now see what increase might be brought to the forest wealth of Spain. For this purpose we will rely on the authoritative opinion of Viscount de Eza whose words carry weight where Spanish agricultural economy is concerned (1).

Of the area of Spanish territory which cannot be utilized except as woodland about 6,000,000 hectares are covered with forest trees, about 13,000,000 hectares are covered with thickets or constitute pasturage, and there are about 700,000 hectares of permanent grass-land and something like 5,500,000 hectares of uncultivated and waste land.

A beginning can be made by providing that these uncultivated and waste lands be afforested so that they become productive. To make the necessary roads, dwellings for forest rangers and mountain pasturages will be to give continuous employment to workers who are now obliged to swell the exodus of the mountain people, and it will also be to attain to the estab-

(1) We should recall that Viscount de Eza was president of the Association of Agriculturists of Spain, a post which he left in 1917 when he was nominated Minister of Fomento. He is now president of the Institute of Social Reform. The calculations we reproduce are borrowed from his work, *El problema agrario en España*, published in 1915.

lishment of industries which will increase the value of raw material. All this combined will bring about an increase in the yield of the soil which, according to the author we have named, might increase in the proportion of 11.2 to 1 or, in other words, each million hectares planted with forest trees and now worth 50,000,000 pesetas would after thirty-five years represent a capital of 560,000,000 pesetas. Taking the most cautious estimates as a basis, that is to say taking it that 75 per cent. of this area of 5,500,000 hectares of uncultivated and waste land is planted with forest trees while the rest is thickets and pasturage, that mountain pasturages are chiefly relied upon to make afforestation square with stock keeping, that the average value of these lands is 50 pesetas a hectare, and that 133 pesetas per hectare planted with forest trees will be spent on the improvement of roads and communications, on housing and on other objects, at the end of thirty-five years (1) each million hectares will be worth 560,000,000 pesetas. Besides, during these thirty-five years profits will certainly be made, since more than 5,000,000 hectares will be covered with timber, firewood, resinous plants and serviceable pasturage, to say nothing of the advantage of being able profitably to pay 15,000,000 pesetas in daily wages to workmen who would otherwise form a large part of the emigrant rural class.

It should be remembered that the capital of 560,000,000 pesetas, which the value of the wealth created by every million hectares planted with forest trees will represent, will, on a very moderate estimate, pay interest to the State at the rate of more than 4 per cent. The area intended for thickets and pasturage will yield a liquid profit of 2 pesetas a hectare, almost the equivalent of the present yield of the woods managed by the Ministry of *Fomento*. We will now turn our attention to these woods, having spoken of the most ungrateful soil found in Spanish territory.

The area covered with forest trees, namely 2,117,243 hectares, now gives the wretched average yield of 3,158 cubic metres of timber a hectare. Even if we add to this the corresponding yield of firewood we are still very far from the production which might, in spite of the unorganized state of this area, have been expected. In these woods yields going up to 81 pesetas a hectare in value are sometimes recorded. Nevertheless the total yield per hectare of high forest, coppice and thickets in the whole forest area for which the Ministry of *Fomento* is responsible is only 2.15 pesetas.

The author we are following considers that on the 2,117,243 hectares of forest-trees a production worth 30 pesetas a hectare might be realized. In the coppices, which now cover 1,252 368 hectares, a yield of 10 pesetas a hectare would be reached, and in the 1,447,779 hectares registered as thickets and pasturage one of 2 pesetas a hectare.

(1) Viscount de Eza places this period at 35 years because he considers that this length of time must elapse before forest trees become normally productive. He notes, finally, that the calculations made with regard to this particular take into account interest at 3 per cent for such number of years on the value of the soil, because this capital is one which is exposed to no risk, and interest at 5 per cent on the remainder because plantations are liable to damage by fire and various other misfortunes.

To resume : according to Viscount de Eza, the increase of the annual yield of the public capital existing in forests, which is to be hoped for at the end of thirty-five years, is as follows :

	Pesetas
For every million hectares of uncultivated and waste land planted with forest trees an increase of capital of about 510,000,000 pesetas and a yearly income of 20,400,000 × 5 pesetas	102,000,000
As increase in the average production of the woods registered as being of public utility, that is as increment of the present production of 4,817,390 hectares	68,749,745
That is, the total increase of annual income would be	170,749,745

§ 4. Consequence of the present position of forests.

While the critical position of Spanish woods and the defective use made of them represent a considerable loss of wealth. they also have deplorable effects on the system of watercourses and on the rural exodus.

From the hydrographic point of view the Spanish peninsula can be divided into two parts by an imaginary line joining Tarragon, Leon and Huelva. The district north and west of this line is subject to the influence of the sea and constitutes a zone of humidity. It is easy in it to grow in good conditions some kinds of crops ; natural resources are comparatively large and population is comparatively dense. The rest of the territory of Spain, namely nine tenths of the whole, is characterized, except some parts of the Mediterranean coast, the Andalusian district and the valley of the Guadalquivir, by a rigorous climate and a dry and arid oil. Of the cultivated area of Spain only 1,231,094 hectares, that is 2 per cent. of the total area and 5 per cent. of the cultivated area, are irrigated. The remainder depends on the incidence of rains which is so largely influenced by the existence of masses of trees. Because these are lacking and there is surface evaporation in consequence, the evaporations from the Atlantic pass over Spanish territory without being condensed into rain. It is only in the coastal regions of the north-east that the rainfall reaches from 750 to 1000 millimetres, or even, as at Santiago, 1,500 millimetres. In the centre it does not reach 600 millimetres a year, in the south-east certainly not even 300 millimetres (1).

Rains are insufficient and they are also irregular. In the summer months not more than 50 millimetres of rain fall in the northern district and not more than 28 in the south, and the beds of watercourses remain almost dry. Moreover during the thawing season in the mountains and

(1) The average annual rainfall in Europe is 575 millimetres in the plains and about three times as much in mountainous districts. In France it is not less than 770 millimetres.

the short period of rains, streams which had seemed small and insignificant become terrible torrents, for not meeting on their course the vegetation which would check and stay their current, they rush downwards with extreme violence and annually flood whole districts, plunging the farmers into the greatest misery (1).

From what has been said it is clear that to give water to the numerous districts which are burnt by the sun almost all the year round, and to regulate the watercourses of the country systematically, so as to utilize them and at the same time to avoid the disasters of floods, is a problem which should above all others receive the attention of the government and of public opinion.

This urgent necessity, universally felt in Spanish rural circles, has given rise to two different currrents of expert opinion with regard to the manner in which the water problem should be solved. These currents, which are in reality not mutually exclusive but mutually complementary, are known in the country as the drainage and irrigation policy and the forest policy. The supporters of the former recommend that the problem be solved by immediately constructing large drainage and irrigation works — canals, reservoirs, etc. — as was done in the Nile valley. Those in favour of the second policy maintain the necessity of reforesting Spanish woods before undertaking these works, for they state that canals and rese voirs will be useless if there be no water to flow into or collect in them, and that it would, on the other hand, be prejudicial, when the great winter spates occurred, to retain water on a denuded soil. The supporters of the drainage and irrigation policy retort that the problem needs to be solved promptly, even if only partially, and that since a reforestation which would influence rainfalls and watercourses would need at least thirty-five years, it is necessary during the lapse of this period to improve the present system of irrigation by undertaking the works which can be executed with relative speed.

We do not wish to weary our readers by following in detail the discussions of the supporters of one and the other programme, which, when all is said, are mutually complementary. We will merely state that the measures taken by the government in this matter during the last twenty years are, generally speaking, an application of the *drainage and irrigation policy* (2).

(1) The important watercourses are themselves extremely irregular for the reason stated; thus, the flow of the Ebro measures near its source 93 cubic metres a second in summer and only about 4 cubic metres in winter. The damage caused by floods is such that in the province of Salamanca the villages have largely disappeared.

(2) In passing we think it useful to notice the chief works hitherto accomplished:

Canal of the left bank of the Ebro — Cost 10,500,000 pesetas; area irrigated 100,000 hectares — lands previously unproductive have been transformed into rich paddy-fields.

Canal of Aragon and Catalonia — Cost 36,000,000 pesetas; area irrigated 100,000 hectares — has allowed much progress to be realized on the cultivated lands it waters.

Molinito Reservoir. — Cost 72,000 pesetas; area irrigated 600 hectares which annually give a yield equal to the cost of the works.

In the domain of drainage and irrigation the public authorities in Spain have not been behindhand, for the works of which we have just spoken have been executed almost entirely by means of State resources. As much cannot be said where the question of forests is concerned. Very little has been done for the woods : out of 2,000,000 hectares to be afforested, afforestation has been accomplished only on 200,000 hectares in forty-five years ; while as regards binding and planting the dunes, prospecting has been done on 2000 hectares but the work has been completed only on 976 hectares. And so for months together the Spanish peasant watches the horizon for the rain which alone can refresh his land, and which comes rarely, or in such form that he is obliged to abandon his land, since dikes, barricades and earthworks and the other, costly works to which, for lack of trees, the competent public departments must have recourse, cannot contain its fury.

We will however examine the official action which has been taken in the matter of developing and protecting forest wealth, confining our attention for the reasons already stated to the public woods and forests.

§ 5 The official organization and reforestation of the woods and forests.

During the first half of the nineteenth century the idea of establishing a department of forests began to be entertained in Spain. It was established by royal decree of 30 April 1830 that there should be an inspectorate of woods within the corps of civil engineers, and later, in 1848, the Special School for Forest Experts was inaugurated. Until experts began to be turned out by this school, the utilization and enjoyment of the woods was limited only by the needs of the communes to which forest wealth belonged almost entirely, as it still does.

At first an official expert staff was made exclusively responsible for the organization of the woods. This staff had to draw up for each wood a plan showing what had to be done in order that it might be most profitably utilized. An independent and well planned service of forest organization was not formed until 1890. Since that date the richest forests of Spain have little by little been brought within the scope of this department, which has obtained fairly satisfactory results. Among the most notable

Mezalocha Reservoir — Cost 45,300 pesetas; area irrigated 16,000 hectares, the first harvest brought in more than the works cost.

Peña Reservoir. — Cost 6,000,000 pesetas; area irrigated 26,000 hectares; the first summer harvest brought in 6,000,000 pesetas.

Irrigation of Upper Aragon — The works now in course comprise a whole system of canals and reservoirs irrigating an area of 300,000 hectares, and costing, according to the specifications, 7,000,000 pesetas.

There are, finally, 54 other reservoirs in Spain of which the capacity varies from 300 cubic metres (Moguer reservoir in Navarre) to 40,000,000 cubic metres (Isbert reservoir in Alicante)

cases of a profit derived from such organization we will mention the forests of Cortes de la Frontera called *El Robledal* and *La Salceda*. These yielded 21,167 pesetas a year before and 113,063 pesetas a year after organization. The State forests in the province of Jaèn yielded 22,624 before and 122,055 pesetas a year after organization. In order to give a more exact idea of the increase of forest production, which has been a result of intensive organization by the department, we give the following data which refer to the forest years 1909-10 and 1914-15 :

		1909-1910	1914-1915	
Forest area organized		329,550	422,859	hectares
» » utilized		259,187	340,260	»
Area variously utilized	Timber,	20,477	36,987	»
	Firewood	18,378	39,088	»
	Pasturage	242,079	322,350	»
	Oak groves (pasturing pigs)	23,203	33,722	»
	Resin	44,905	58,732	»
	Cork and bark	2,798	2,159	»
	Pine cones and other fruits	34,500	28,592	»
	Sand, stones and earth	1,430	52	»
	Other uses	100,415	96,588	»

We will now speak of the reforestation effected by the State. We should state in the first place that the Drainage, Irrigation and Forestry Department responsible for investigations preliminary to this reforestation and its execution was organized by the royal decree of 7 July 1901 which provided for the formation of ten large drainage, irrigation and forestry districts, of which nine now exist effectively.

From the beginning available resources were used in undertaking the works for which this department was responsible. They consisted essentially in covering completely denuded lands with vegetation, regulating torrents, binding dunes—in a word in all that is represented by the improvement of mountain lands which, as we have already said, occupy so important a place in the system of watercourses and therefore not only in the economic and cultural but also in the social sphere.

A measure which might have produced excellent results, had the private owners of woods received it with more enthusiasm, was the law of 24 June 1908, which aims at the same time at constituting an important capital in forest for the State and for individuals, and at carrying out the scheme of reforestation and special works thought to be necessary for improving the conditions of woods and watercourses, all this to the evident advantage of landowners and adjacent districts.

This law of 1908 provided above all that, in addition to the woods

belonging to the State, to the communes and to official establishments registered by the Ministry of *Fomento*, existing woods and lands which had to be reforested would be taken to affect the general interest and to be of public utility, if their case were one of those described as follows :

(*a*) woods growing on the upper slopes of river basins ;

(*b*) woods which, in their existing state or when reforested, could effectively regulate the great variations of rainfall ;

(*c*) woods which prevented landslips and the falling away of rocks or the formation of dunes, which supported or strengthened insufficiently stable soil, protected canals or roads of communication, or prevented the disturbance of the water-supply of towns and villages ;

(*d*) woods which rendered marshy districts more healthy ;

(*e*) woods which, when regularly organized, served to give permanence to the hygienic and economic conditions of adjacent communes.

Following on the necessary investigations, and after receiving information from the competent authorities, the Minister of *Fomento* points out, on his own initiative or in response to the requests of those interested, the woods or lands which should in each province be declared to be protective woods or zones.

By the terms of the law the reforestation it has in view can be effected by the State or by the landowners concerned. In the latter case if an owner of lands or woods situated in a protective zone and having an undivided area of at least 100 hectares, claim the right to carry out reforestation himself, the department will give him all the expert help he can need, and also seeds and saplings and exemption from the land tax, until such time as the wood shall have become fully productive in the opinion of the department. Such an owner will also have the benefit of the premiums established by the law of 1863 (1). If the woods in question are not situated within a protective zone the owners will have the right only to these premiums.

When reforestation is to be accomplished by the State, and an owner or owners contribute for the purpose thereof an undivided area situated in a protective zone and measuring as much as 1000 hectares, the department will annually pay to such owner or owners, while reforestation is in course, as interest on the capital represented by the value of the soil, 3 per cent. of the value at which these woods are assessed (2), and the department will take as the basis of assessment the average for the five years before the law came into force. The department will exempt the woods from payment of the land tax until they have become, in its opinion, fully productive. When the reforestation has once been effected the landowners can be reinstated ; their absolute ownership of the reforested area will be secured by the repayment, without interest, to the State of the costs of

(1) These premiums consists, in general, in exemption from the payment on real estate and the payment affecting tillage and stockfarming.

(2) See article "The Cadastre in Spain" in our issue (*Monthly Bulletin of Economic and Social Intelligence*) for March 1914, page 125.

work borne by the State, not including such sums as have been used to pay occasional extra helpers and forest rangers. If the landowner or landowners cannot at this time repay to the State the capital expended, the department will continue to manage and draw profit from the newly afforested woods until it has recovered the entire sum it has expended, when the afforested area will be secured as the property of the owner of the estate. If, when afforestation has been accomplished on a determined area, the landowner or landowners prefer to cede their title to it to the State, the State will pay them the capital value of the soil according to the valuation made for the tax.

All owners of unregistered lands and woods situated in protective zones may be admitted to enjoyment of the benefits of this law and subjected to its provisions, whether they are individuals or public or private bodies. Such owners may also form themselves into a society with the object of benefiting by the advantages which the department grants to forest areas measuring more than 1000 hectares. Municipalities, provincial deputations and corporations having a public character are authorized to co-operate in the formation of societies of this kind by ceding to them their lands or woods.

The owner or associated owners of forests situated in protective zones will be economically masters of their property and able to dispose freely of their property rights, but in the management of their forests they must follow a plan officially approved for each of them and aiming exclusively at guaranteeing the preservation of the forests in question. The department will however interfere only when it becomes absolutely necessary to exercise those functions of inspection and superintendence which will constantly ensure the permanence and maintenance of the whole forest area, and it will respect all reasonable plans drawn up by the owners for deriving profit from the forests, if these plans fulfil the various ends at which the law we are examining is aimed.

If the owner of a wood situated in a protective zone do not wish to reforest it on his own account or to join a society and make an engagement with the State for its reforestation, or if he declare that the plan approved by the State is not agreeable to him, the State may, if it think well, enter upon the wood compulsorily in order to manage it in the public interest.

With the object of ensuring the preservation and improvement of woods and forests in the productive zones the State will: 1) provide the woods with working roads; 2) make special roads and paths and protective zones along railways, and establish signalling stations and necessary telephones in order to facilitate the extinction of fires and prevent them; 3) increase the staff of forest rangers and so regulate the service that they live in the forest and are responsible only for the district they can supervise properly; (4) determine the best methods for fighting the pests of trees and adopt them; (5) establish in the agricultural schools practical instruction in forestry and forest organization; (6) organize nurseries of the varieties of

TABLE I. - *Works of Drainage, Irrigation and Afforestation up to 31 December 1910 — (Area in hectares).*

River basins	Schemes			Works executed				Protective works and natural reforestation	Total area for which the Forest Department is responsible
	under consideration	examined	Total	rectifications	rectifications and artificial reforestation	artificial reforestation	Total		
1st Division — Lower Valley of the Ebro and Eastern Pyrenees	—	26,469.00	26,469.00	99.76	225.00	670.41	995.17	3,444.73	5,188.23
2nd Division — Valley of the Fucar . . .	4,225.40	17,094.18	21,319.58	—	1,150.17	2,847.09	3,997.26	17,760.45	21,757.81
3rd Division — Valley of the Segura . . .	10,291.00	38,047.00	48,348.00	641.00	2,155.65	4,472.00	7,268.65	39,914.20	48,682.92
4th Division — Valley of the Tagus . . .	33,123.82	34,779.15	68,202.97	—	659.00	1,038.28	1,697.28	857.00	12,188.49
5th Division — Valley of the Guadalquivir.	—	24,572.80	24,572.80	120.00	258.00	1,025.00	1,403.00	10,072.00	21,531.85
6th Division — Middle Valley of the Ebro.	9,682.90	26,247.96	25.930,86	108.00	100.00	656.10	864.10	4,070.02	17,967.02
7th Division — Upper Valley of the Ebro.	1,000.00	22,469.89	23,469.89	—	—	390.00	390.00	—	800.00
8th Division — Valley of the Guadarrama.	—	962.00	962.00	—	805.00	37.94	842.94	157.06	962.06
Totals . . .	58,663.12	190,641.98	249,275.00	968.76	5,352 82	11.136,82	17,458.40	76,275.46	129,078.38

trees most suitable to all the different districts in order to supply any needs which may be felt by the department and individuals.

Such are the chief provisions of the law made on 24 June 1908. They show clearly the importance of this measure and the beneficent effects it might have had on the forestry system of the whole country. Unfortunately, perhaps because it is a measure of encouragement and its provisions are not at all or hardly coercive, while it has wrought much benefit to districts where it has been applied, such application has not taken place to an extent large enough to transform the situation of the country with regard to forestry. Two very important factors, social in character, have greatly contributed to this: the excessively individualistic character and the equally excessive lack of confidence in the department — peculiarities common to all the Spanish agricultural class — of the owner of woods when he himself undertakes their management; and, in the case of large properties belonging to large landed proprietors, the absenteeism of these proprietors which makes the management defective, and the fact that they are uninterested in any scheme which does not immediately increase their incomes.

Having made all these facts clear, we will proceed to note what is represented by the works accomplished by the Drainage, Irrigation and Forestry Department up to 31 December 1910 (1), and the comparative production of the woods affected by works of reforestation in the forest years 1909-10 and 1914-15.

TABLE II — *Extent to which the Areas of Forests subject to Reforestation have been Utilized.*

	1909-1910	1914-1915
Forest area subject to reforestation	117,257	117,961
Forest area utilized	79,945	83,476
Extent utilized for:		
Timber	739	2,124
Firewood	5,640	7,753
Pasturage	69,536	65,792
Oak woods (pasturing pigs)	370	400
Esparto grass	986	17,239
Resin	3,676	—
Cork and bark	—	1
Pine cones and other fruits	6,053	—
Sand, stones, earth	5,187	5,661
Various	8,945	28,349

(1) We have no later data as to these works and think none exist.

§ 6. Recent legislative provision for the preservation and development of forest wealth.

To all the attacks which have, as time has passed, been made on the forest wealth of Spain one more has lately been added. The extraordinary circumstances due to the European war have established absolutely unhoped-for prices for timber and firewood. Individuals have therefore wished to realize the value of their woods while these prices prevailed, and in order to do so they have not scorned to carry on tree-felling and destruction which has been contrary to the most elementary rules of science and has threatened largely to annihilate Spanish forests.

Faced with such a danger, and recognizing that private interests were entitled to obtain the largest possible return in view of the state of the markets, the Spanish government thought it wise and right to interfere in order to guard against the threat represented by the desire for profit of individuals, a threat directed against the public interest which in this case identified itself with the forest wealth of which, as we have seen, such ill use was already being made. With this object the public authority finally passed the law of 24 July 1918 and the appurtenant provisional regulation of 5 September in the same year.

As provided by law, and without prejudice to the ruling of the law of 24 June 1908 which we have examined, it is prohibited, for the duration of the war and for six months after the peace has been signed, to make forest clearings in a way calculated to bring about the destruction of the following species: *abies, pinus, juniperus, alnus, betula, quercus, fagus. castanea, ulnus, fraxinus, olea, eucaliptus, acer, tilia, amigdalus, ceratonia* and *corylus*. Those cases will be excepted as to which it is fully proved, according to expert opinion, that to transform forests which are not situated on estates having the protective character defined by the law of 1908, into farm land is economically profitable, the landowner making himself responsible for executing within a suitable interval of time the works this transformation represents. For the case of the trees called riparian trees, growing in a soil which it is most economically advisable to use for arboriculture, an exception is also made when the landowner undertakes to replant immediately.

The value as timber and firewood of cork-oak, olive, carob, hazel and almond trees, may be realized by felling the trees only when they are obviously too old for other purposes, the latter fact being proved. Forest-trees of the other kinds can be utilized if the trunks of the trees felled have a diameter of at least 12 centimetres at a level 1.30 metres above the soil.

When unorganized felling is called for by conditions of climate or exposure or local custom or use, the owner of the wood may ask to be allowed to undertake it, if he engage to prevent the access of grazing animals to the area where it will take place.

In order to apply these legislative measures a Committee for the Preservation of Private Forest Wealth is formed under the presidency of the governor in every provincial capital. It consists of four members of the

Provincial Committee of Agriculture and Stockfarming, and of representatives of the classes interested who will include three owners of woods and two woodworking manufacturers or timber merchants. An expert in forestry will act as secretary. These committees will have to discuss the tree-felling permits to be granted and grant them, to determine liabilities, to inspect the manner in which forests are utilized and note abuses. The execution of their rulings will be entrusted to the heads of the forest districts, or to the agronomic department when there is question of trees belonging to a farm. The staff subject to these heads will have free access, on presentation of regular proofs of identity, to the properties. Further, the civil guard and the corps of forest rangers will watch over the utilization of forest products on the territory assigned to them, and will check it by means of the authorizations and permits to transport issued from the offices of the heads of the districts or the department already named. They will report on this supervision in writing, notifying the committees as to the results of their investigations and of any accusations they may have had to make in the matter of the preservation and the development of private forest wealth.

The individuals affected by this law will alone be obliged to present to the committees a written statement as to their woods, when they propose to undertake works in order to utilize timber or firewood. They will be exempt from this obligation if they do not make this utilization or make it only to supply their own needs. If however the civil guard or the forest guard denounce timber felling of this description, stating that it is done on a scale exceeding that required to supply the needs of the owners of the estates in question, these owners will be obliged to afford the provincial committees all possible explanations, and will be responsible if these explanations are not satisfactory.

The forest district administrations will be responsible for the whole course of the business in which the provincial committees take part, as also for the granting of permits of egress, the constitution of everything tending to improve and increase forest production, and procuring on occasion the transformation, in the undoubted interest of increased national wealth of a particular kind of cultivation.

The costs which the staff will have to meet because of the expenses attendant on the above provisions will be charged to the State. For this purpose there is an annual credit of 200,000 pesetas in the estimates of the Ministry of *Fomento*.

As for fines, 25 per cent. of the value of products wrongly used is fixed as the measure of those imposed. An interval of time within which fines must be paid will be proportionate to their amount and will be not less than ten and not more than twenty days. When this interval has passed payment may be exacted compulsorily; and the amount of the fine will then be increased at a rate not exceeding 5 per cent. a day within an interval of time not exceeding that originally allowed for its payment.

One third of the fines recovered will go to those who denounce offenders. Of the two remaining thirds a special fund will be formed, exclusively intended to provide grants of so much a hectare to owners of forest estates who

distinguish themselves by the perfection of their cultivation and the superior intensity of their production, and on occasion this fund will also be used to indemnify persons who suffer damages. Landowners who consider they have a right to such grants or indemnities should apply to the Committee for the Protection and Preservation of Private Forest Wealth in the province in which their lands lie, in order to obtain them, stating the grounds of their application in detail. The provincial committee will accept or reject the application and determine the amount of any indemnity or grant, after an enquiry has been made by the chief expert of the forest district and after it has made all arrangements for an examination of the land which may be necessary. Grants and indemnities may not in any case be accorded to a landowner who has previously had to pay a fine for infringement of the law in question.

The law of 14 July 1918 provides finally, by its additional or temporary articles, that the validity is maintained of all rights formed or acquired by public contract and existing before the Bill was introduced into Parliament, so long as the first copy of the contract in question be presented to the competent Committee of Protection and Preservation within fifteen days of the time at which such contract comes into force. Further the enactments of the law will not prevent either the unimpeded carrying away from properties of forest products already felled when the law came into force, or the transporting of such products to factories and markets.

***

We will conclude these notes on the problem of forestry in Spain, and on the action of public authorities with respect to it, by stating that in July 1918 the Minister of *Fomento* introduced into Parliament, as a complement to the law of the 24th of the same month, a Bill regarding the development of Spanish forest wealth. This Bill, which is being discussed, has five principal parts. In the first the forest possessions of the country are enumerated and classified, and the measures on which their preservation depends are indicated. In the second the forest property of the State, the villages and public establishments is determined, and it is provided that the formation of a general catalogue of public woods be proceeded with as a matter of urgency. The third part deals with the system of organizing and reforesting the State's forest possessions, with a view to increasing and improving the production of the forests constituting them. The fourth part deals especially with drainage irrigation and forestry works in relation to the law of 24 June 1908. Finally in the fifth part it is provided that the State will bring about the development of private forest wealth by means of money premiums won by special competitions. For this purpose grants will be made to societies, syndicates, farmers' associations etc.; saplings and seeds will be granted at cost price; instruction in forestry will be enabled to spread; there will be campaigns against the natural pests of forests; fires will be prevented; the combination of neighbour landowners with a view to making industrial use of raw material and to constituting insurance and credit societies, etc., will be stimulated.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

BRAZIL.

FOR THE INTENSIFICATION OF ARBORICULTURE IN BRAZIL. — *Secretaria da Agricoltura, Commercio e Obras publicas do Estado de São Paulo — Boletim de Agricultura*, No 4, São Paulo, April, 1918

There was promulgated in Brazil on 6 March 1918 a legislative decree (No. 12,897) which aims at intensifying arboriculture and especially the growing of the eucalyptus tree, at remedying the wasting of the extensive and rich forests of the republic, and at obtaining at the same time fuel and timber for the building and other industries.

The decree establishes that there shall be granted to growers of eucalyptus trees and other forest trees of recognized utility, if they begin such cultivation within three years of the date of the decree, a premium of 150 reis for every tree reaching normal development and at least eighteen months old, on condition the number of trees planted is not less than 500.

To facilitate this cultivation near railway stations and lines, establishments belonging to the State and municipalities, and workshops, factories and private enterprises in which a large number of workmen are employed, the government will make a free grant of the lands which it owns or is able to acquire.

The decree also lays down that the government will continue to distribute seeds freely by means of the Botanic Gardens and other establishments of the Ministry of Agriculture and will supply technical instruction, information and publications which may be of interest to growers.

In order to obtain the premium of which we have spoken certain formalities are established which an aspirant must fulfil: (*a*) he must apply beforehand to the Ministry of Agriculture, Industry and Trade for the concession of the lands, stating what is the area to be cultivated, its situation, and the kind of plantation which he desires and the trees he wishes to grow; (*b*) he must present documentary proof of the fact that he is owner or lessee of the lands which are to be cultivated, unless indeed these have been ceded to him by the government, (*c*) he must inform the Treasury official of the date on which he began the cultivation and give this official leave to visit the cultivated area as often as he thinks fit; (*d*) he must prove by the testimony of the Treasury official that the plantation has all the requisites stipulated in the decree and that no government premium has yet been awarded to him; (*e*) he must apply for payment, stating the sum due to him by the terms of the decree and the office at which he desires to receive it.

In the application which he must make to the Ministry of Agriculture in order to obtain the lands freely he should state the area which he desires to obtain and the situation he prefers.

Failure to comply with any one of the formalities enumerated will deprive the applicant of the benefits established by the decree, and oblige him to restore, without right to any compensation, any land already ceded to him by the State.

The decree also establishes that plantations made along railway lines must in no way constitute an impediment to traffic or the maintenance of the lines.

In order to give all possible stimulus to arboriculture, as described, the benefits mentioned are open not only to workmen, the forest rangers of the Union, and the guards of public establishments and of federal colonies belonging to the State and the municipality, but also to institutions of instruction and assistance in the colonies and in the military departments and regional districts, so long as these institutions are authorized by their superiors to practise arboriculture in accordance with the rules laid down by the decree in question.

The fiscal functions for which the decree provides will be fulfilled by agricultural inspectors and other expert officials of the Ministry of Agriculture, appointed by this ministry They will be obliged to visit the plantations and inform the government as to the state of each of these and to produce necessary evidence and all the declarations required.

Finally the decree provides that the Minister of Agriculture shall, at the request of those interested and without expense to them, send to make examinations of lands, and shall use all means in his power to bring about the fulfilment of the formalities enumerated.

The decree we have examined meets one of the chief economic needs of the republic of Brazil. For if the destruction of forests is injurious in every country, as affecting climate and the fertility of the soil, it is doubly so in Brazil where when the precious growth of the immense forests is destroyed one of the chief treasures of the country is ruined. The provisions of the decree are therefore opportune, for by the free grant of land and seed, the grant of premiums, and all the measures facilitating compliance with the formalities through which these premiums are obtained, agriculturists will certainly be encouraged fully to develop their cultivation of plantations.

RUGGERI ALFREDO, gerente responsable.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

Origin of the Institute and Summary of the International Treaty.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall:

(*a*) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets;

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(*c*) indicate the wages paid for farm work;

(*d*) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and, if possible, any effective remedies;

(*e*) study questions concerning agricultural co-operation, insurance, and credit from every point of view; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit;

(*f*) submit for the approval of the various governments, if necessary measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10*d.*	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	1*s.* 1 1/9*d.*	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	9 32/64*d.*	at par
1 Dollar, gold ($) (100 cents) (United States)	=	4*s.* 3/16*d.*	at par
1 Drachm, gold (100 lepta) (Greece)	=	9 33/64*d*	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1*s.* 7 59/64*d.*	at par
1 Franc (100 centimes) (France)	=	9 33/64*d.*	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 29/64*d.*	at par
1 Leu (100 statinki) (Bulgaria)	=	9 33/64*d.*	at par
1 Lira (100 centesimi) (Italy)	=	9 33/64*d*	at par
1 Litre	=	0.21998 gallons 0.0275 bushels	
1 Mark (100 Pfennige) (Germany)	=	11 3/4*d.*	at par
1 Mark (100 penni) (Finland)	=	9 33/64*d.*	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	2*s.* 2 61/64*d.*	at par
1 Milreis, gold (Portugal)	=	4*s.* 5 19/64*d.*	at par
1 Peseta, gold (100 centimos) (Spain)	=	9 33/64*d.*	at par
1 Peso, gold (100 centavos) (Argentina)	=	3*s.* 11 57/64*d.*	at par
1 Pound, Turkish, gold (100 piastres) (Ottoman Empire)	=	18*s.* 0 15/64*d.*	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	2*s.* 1 3/32*d.*	at par
1 Rupee, silver (16 annas) (British India)	=	1*s.* 6*d.*	at par
1 Talari (20 piastres) (Egypt)	=	4*s.* 1 11/32*d.*	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	2*s.* 0 37/64*d.*	at par
1 Zentner (Germany)	=	110.23171	lbs.

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Part I: Co-operation and Association

RUSSIA.

AGRICULTURAL CO-OPERATION IN SIBERIA

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§ 1. THE DAIRY SOCIETIES AND OTHER FORMS OF CO-OPERATION.

Up to some twenty years ago the almost sole object of stockfarming in Siberia was to procure a quantity of butcher's meat sufficient to supply local needs. It was only in 1893 that some enterprising foreigners, largely Germans and Danes, established themselves in the country and offered animals and implements to the inhabitants on credit. The debts the latter thus incurred were repayable gradually and in kind, that is in milk, cream or butter, but no price was fixed for these products in advance. The bold initiative resulted in a general and rapid development of the dairy industry throughout Western Siberia. The small cultivators were however made to depend on foreign men of business, who profited by the plentiful production to lower prices to a point which made it very difficult for the peasants to free themselves from the debts they contracted. As much as 25 kopeks were obtained for a *pud* of milk, otherwise 45 centimes for a kilogramme, and 22 kopeks for a Russian pound (510 grammes) of butter.

This was injurious to the quality of produce, and the judges at the 1901 dairy exhibition of Kurgan were obliged to declare that in general the quality of Siberian butter was very mediocre.

In order to end this state of affairs the president of the Kurgan section of the Moscow Society of Agriculture, Alexander Balakscin, addressed himself directly to the Ministry of Agriculture, proposing to the government that suitable steps should be taken to favour the constitution in Siberia of dairy societies on a co-operative basis, of the Danish type.

The proposal was received favourably. A credit was set apart of 7,000 roubles a year for three years, and a committee, having Balakscin as its president, was appointed, to take all the steps necessary to the realization of the scheme.

Thanks to the active work of all the members of the committee the best results were obtained. After hardly three years quite 200 *artels* or dairy societies had arisen in Western Siberia and producers belonging to them were at last able to free themselves from exploitation by foreign men of business. But the latter were still all-powerful in the sphere of transportation and exportation, and therefore they paralyzed the work of the co-operative societies, fixing enormously high tariffs for the transport of butter.

It was finally decided to combat this kind of exploitation also by the method already employed where production was concerned, that is by the method of co-operation.

On 10 November 1907 the delegates of 12 of the chief dairies of the country constituted a union which aimed especially at exporting dairy produce directly.

As agriculture and stockfarming developed and the production of milk and its derivatives increased, the peasants of Siberia felt the need of organizing the trade in and export of butter by means of dairy societies or *artels*, for the foundation of which the help of experts sent by the government was invoked. The basis of the co-operative societies is the obligation of members . (1) to deliver all their milk to the societies on pain of fine ; (2) to be collectively liable for the society's engagements. At the time of foundation the individual members make payments proportionate to the number of cows they possess, from 4 to 5 francs for a cow. Those who cannot pay cash supply milk of similar value.

The management is in the hands of a general meeting of members, of whom each one has the right to a single vote whatever number of cows he may own. The meeting appoints a technical director, and a manager delegate responsible for the society's funds and books. The latter arranges for the choice of the staff, the acquisition of material, the sale of the butter, etc. The distribution of the profits is made in proportion to the amount of milk supplied.

The struggle with the single companies of individualist speculators into which these societies entered ended with the triumph of the organized peasants, because these latter surpassed the individualist companies in the field of scientific hygiene and the technique of production.

The co-operative societies' great period of production began in 1902 when Balakscin, who placed himself at the head of the Siberian co-operative movement, received from the government the authority and the credit

which allowed a larger organization of the dairy societies and an improvement of butter production. On Balakscin's own initiative there was founded a society to which 271 co-operative societies, having 52,000 members, belonged as early as 1907.

In the beginning the dairies sent the butter they produced to exporting firms with which they made yearly contracts. But these firms often broke the contracts, preferring to pay small fines rather than keep to them when the price of butter increased, and the dairies thus incurred appreciable losses.

All these circumstances impelled the peasants towards proper organization. Therefore in 1901 there was founded at Kurgan a Society of Agriculturists, having 33 members of whom 5 were dairies, and aiming at providing for the exportation of butter. In 1903 the dairy members numbered 29 and the butter they supplied constituted 37 per cent. of the total amount of butter exported. Another society of this kind was formed in the province of Tomsk.

But all this represented only a transitory stage.

In 1908 the society founded by Balakscin was transformed into a Union of Siberian Dairy Societies. We will pause to consider this powerful co-operative organization.

The district over which its activity extends measures about a million square versts. The dairy societies belonging to it are informed by the following principles:

(1) mutual liability for all obligations assumed; (2) common management of current business, (3) admission fee of each member proportionate to the number of cows he owns; (4) fine of 5 roubles per milch-cow if the milk is sold elsewhere; (5) fine for adulteration of butter; (6) withdrawal from the society can be allowed only as following on a change of place of residence — a member withdrawing for other reasons has no right to ask for any part of the capital and has no dispensation from his share of the collective liability for the debts contracted by the society up to the day of his withdrawal; (7) the dairy may fulfil other functions, for instance open co-operative stores where members are obliged to make their purchases.

By means of these consumers' societies the dairies have dealt a serious blow at private traders who sold to the peasants, at usurers' rates, goods often of inferior quality, taking advantage of the necessity to buy for credit in which the peasants found themselves at difficult moments.

These stores were directly supplied by means of a large goods depository founded at Kurgan. They rapidly assumed a large development owing to the real advantages they offered and their practical usefulness.

The annual net profits realized by these stores is distributed among the members in proportion to the purchases they have made.

Goods are also sold on credit up to a value not exceeding that of the milk delivered every month to the co-operative society.

The dairies founded many other businesses — co-operative mills, slaughterhouses, clothes and shoe factories. Latterly they were also

beginning to found cheese factories in which some thousands of puds of a cheese sold in Great Britain were produced.

The dairy societies also undertake the construction of elevators for the storage of grain and organize the exporting of grain abroad.

The Union of Siberian Dairy Societies comprised at first only 12 dairies having a capital of 21,000 roubles. But as early as 1912 the union numbered 328 dairies, of which 235 were members in 1913; and 502 stores which sold 14,066,251 roubles' worth of goods as against seven and a half million roubles in 1912. The net profits amounted to 56,683 roubles.

The Union of Siberian Dairies is governed by rules to which members subscribe on admission. Each dairy pays an admission fee of 10 roubles and acquires one or more shares of 100 roubles each. All the butter the dairies make must be consigned to the union from which they must acquire the material and goods necessary to their buttermaking. The dairies are liable for the engagements into which the federation enters in the measure of half a rouble for every pud of butter delivered to the union. The affairs of the union are managed by a committee of three members and by the general meeting of the delegates of the dairy societies. All resolutions must be unanimous.

We will now see how the co-operative sale of butter is organized.

The dairy societies of Siberia found, as we have already noticed, that a lucrative export trade, which was especially in the hands of persons of foreign nationality, was already in existence. Denmark was the first country to import Siberian butter. A Danish merchant named Pallisen founded in 1896 the first butter exporting house; two years later, in 1898, he had established eight of them, and 90 per cent. of all the butter exported passed through his hands and went to Denmark.

Later Germany and Great Britain began to buy butter on their own account. Great Britain came to be the most important market for Siberian butter: 1,546,000 puds of butter worth 22,218,000 roubles were exported thither in 1908. In the same year the export to Germany weighed 1,110,000 puds and was worth 15,225,000 roubles. The export to Denmark in 1909 weighed 700,000 puds and was worth 9,489,000 roubles. Since the export trade had become almost a monopoly of foreign merchants, the union, wishing to eliminate the middlemen, entered into relations with British firms which agreed to take Siberian butter, making payments based on prices in local markets. This contract was afterwards modified so that the purchasing firm was obliged to make a partial payment based on the prices paid in Siberia, and take the rest on commission; profits and losses were halved by the union and the purchasing firm. But the course of proceedings did not lead to the hoped for results.

Finally in 1912 the union founded in London a stock company called the Union of the Siberian Co-operative Associations and having a share capital of a million roubles. The shares are of two kinds: 100,000 preference shares at 6 per cent. make a paid-up capital; and there is an unpaid capital of 100,000 shares of a nominal value of 50 roubles each, which, by English law, give a right to participation in the management of the company's

affairs. The paid-up shares are held, in equal parts, by the two Russian and the two British directors of the union.

The London union receives the butter of the Siberian dairies on commission, and has no sooner received it than it sends 90 per cent. of the price obtaining on the foreign market to the union. The remainder is paid when the sale has taken place, interest on the share capital being first deducted at the rate of 6 per cent. A percentage of 2.5 goes to pay the expenses of the union's foreign agencies, and about 2.25 roubles a pud are allowed to cover the expenses of transport, consignment and insurance.

The largest trade is by way of the ports of Riga and Revel; but latterly the chief exporting places were Kindava and Petrograd, owing to the opening of the northern Ekaterinburg-Perm railway which is about 250 versts shorter than the line first used.

Exporting goes on chiefly in the so-called butter season which lasts from the 1st to the 14th of April and the 1st to the 14th of November, and takes place twice a day in special chilled cars. As compared with the 4,310,126 puds which were the total Siberian export of butter to Europe in 1911, 2,329,292 puds, worth 46,924,186 roubles, were exported by the dairies during the butter season, and 980,000 puds, worth 14,919,933 roubles, in the other months of the year. In 1912 the amount of butter exported from Siberia was 4,525,000 puds; in 1913 it was 4,870,727 puds.

We will now notice the extent to which the Siberian dairies contribute to these large amounts.

In 1910, 253,954 puds of butter were sold to the union by its member dairies and only 15,548 puds by unfederated dairies. The members of the union received 59 kopeks a pud for their milk; sales amounted to more than four million roubles. In 1911, in spite of weak production, 237,000 puds of butter were exported from the member dairies and 24,000 puds from the other dairies. Sales amounted to 4,600,000 roubles; the milk cost 61 kopeks a pud.

In 1912 the union exported 449,329 puds of which only 28,000 puds were from non-member dairies; sales amounted to 7,500,000 roubles. Net profits were 33,800 roubles and members received 64.5 kopeks per pud of milk. The union's capital reached 86,000 roubles this year.

In December 1913 the Siberian dairies had 120,000 members owning 300,000 milch-cows; butter sold for more than 6,000,000 roubles, or 300,000 roubles more than the prices customary in Siberia would have yielded.

In 1911 the Union of Dairies of the Ural District separated itself from the Union of Siberian Dairy Societies. This new federation undertook not only to trade in butter but also to sell its members' grain. At the end of July 1911 it had acquired 9,000 puds of rye-seed and about 20,000 puds of rye flour. It sold these to its members, respectively at 1 rouble and 15 kopeks the pud, the contemporaneous market prices being 1 rouble and 30 kopeks. It had contracted with the State for the duration of the war to transport and store grain for the provisioning of the army, an engagement which the four elevators at its disposal enabled it to assume. On 1 January 1913 the Union of Dairies of the Ural District already included

121 co-operative societies. Its sales in one year amounted to 9,500,000 roubles.

At the end of March 1918 the Union of Siberian Dairy Societies celebrated the twentieth anniversary of its foundation. Ten years before it had united only 12 dairies and in the first year of its life its sales amounted only to some three million roubles. In 1918 it comprised 2,500 dairies and stores and its sales during the year amounted to 160,000,000 roubles.

The progress so rapidly realized is truly remarkable. The enormous difficulties with which the co-operative movement in general and dairy societies in particular had to struggle in their first years must be remembered if the importance of the movement is to be appreciated. There was a strong opposition The arguments which the first partizans of co-operation adduced in favour of dairy societies in Siberia, their instancing of the great advantages which the whole agricultural population could derive from them, encountered the opposition of sceptics who maintained that the co-operative programme went beyond the potentialities of the peasants, that it demanded men and means not to be found in the country, whereas individuals and merchants possessed these means together with a vast business experience, and therefore could easily get the better of the poor, inexperienced peasants, that, finally the enterprise would inevitably end in failure. Thus it came about that the first advocates of co-operative associations in Siberia were in an absolute minority. But they felt all the justice of their cause and got to work without delay.

The passage of only ten years gave an entirely different appearance to the situation. The minority had succeeded in finding men and means; experience and business relations were overcoming all the formidable difficulties of an earlier time. Every peasant was aware of the incalculable advantages which the new movement was procuring for him. Although they were still in the minority the members of the co-operative societies formed a series of new institutions for the elimination of the parasitic class of middlemen and the direct marketing of their produce.

Thus, in 1917, 95 per cent. of all the butter produced in Siberia emanated from the dairy societies, in other words the former absolute minority had been transformed into an overwhelming majority. Now the peasants of Siberia no longer need the middlemen in order to market their butter They are in direct connection with the great markets, even the most distant of these, both in Russia and abroad. A like progress was realized by the union in the field of distribution. It now possesses vast stores which supply the rural population. It has also acquired a large amount of modern machinery for the production of butter.

As regards the beneficent influence of dairies in the field of education, we need only note the relation everywhere apparent between the number of the co-operative societies and the number of the libraries which have arisen in the country during the last two decades.

In order to estimate the progress to which the co-operative movement in Siberia has attained, it is enough to compare the attitude to it of private merchants in the first years of its existence and to-day. In those first

years merchants regarded the new movement with sceptical indifference, not fearing that it could seriously endanger their profits. Today there has been a profound change in this attitude. The private merchants never cease to look upon the co-operative movement as their enemy, and seek to impede its development by every means in their power, honest and other. The best proof of the strength acquired by the co-operative societies lies in the fact that towards 1913 private capital began a defensive mobilization of its financial forces, the merchants of Kargan turning about 1913 to the Exchange Committee in order to invoke its aid against the activity of the dairy societies which they qualified as " dangerous and destructive to private trade ". But this and other opposition did not really injure the progress of co-operation.

As for the government, it was obliged increasingly to recognize the beneficent importance of the dairies ; and, in wartime especially, it accepted the union's help for the provisioning of the army. From the time of the outbreak of war until September 1917 the Union of Siberian Dairy Societies supplied to the army foodstuffs of the total value of 200 million roubles or about half a billion francs. At the same time the union came to the aid of the rural population during the crisis provoked by the war.

A table reproduced on page 20 of our issue for January 1918 shows the development of the union since 1918.

In October 1917 it was ascertained that 1,300 dairy societies existed, with 1,050 co-operative stores and 21 appurtenant stores, total sales amounting to more than 100,000 roubles.

The extent to which the dairies have increased production and affected the prices obtained by the peasants appears from the following data as to the years 1899 and 1905 which are included in the first period of the Siberian dairies :

	1899	1905
Average annual receipts of a peasant family for milk	43.13 roubles	72.90 roubles
Annual receipts per cow	8.59 »	16.20 »
Average annual yield of milk per cow	27.2 puds	33.1 puds
Average price obtained for a pud of milk	30 roubles	48.8 roubles

The future of dairy societies is completely assured, but the complicated question of their technical improvement remains. As regards the type of dairy required — whether the small or large dairy gives the better results — recent experience seems to favour the large.

An enquiry bearing on 435 dairy societies made in the union's first years confirmed the opinion that the large dairies produce butter of a better quality at less expense.

Local conditions naturally influence the constitution of dairy societies. Thus it has several times happened that the inhabitants of a small village have organized a co-operative society separately because the milk of their cows contained especially much fat, and they therefore did not wish to mix it with the milk of other cows. This difficulty could however be eliminated easily by the method of measuring and value the quantity of fatty substance in the milk, a process requiring experts, and one which only a large organization, such as is the union, can therefore undertake, following the example of Denmark.

The latest news received by the manager of the London agency of the Union of Siberian Dairy Societies, Mr. Jarrov, gives the following figures which are further evidence of the rapid progress of co-operation in Siberia. During 1917 goods were prepared and sold as follows:

	Sale price in roubles
Pork	4,043,270
Frozen meat	1,041,082
Bacon	4,146,829
Smoked meat	5,885
Hares	76,760
Game	11,042
Raw hides	399,264
Total sales . . .	9,724,132

Sales in the first five months of 1918 reached 35 million roubles. If conditions of life were normal the union's business would amount to hundreds of millions of roubles, as the manager of the London agency wrote on 6 December 1918.

Lately various Siberian co-operative societies have taken the initiative in constructing elevators which allow part of the harvest of grain to be stored until a good moment comes for selling it on the market.

The co-operative societies undertaking business of this kind receive the grain, paying a sum on account for it to members, who thus are not obliged in the autumn, when they must make their payments, to sell their grain at whatever price it will fetch. The sum paid to members on account is fixed weekly on the basis of the quotations at neighbouring corn exchanges

When the price of grain is low the sum thus paid may be as much as 78 per cent. of such price; when the price is high it cannot exceed 60 per cent. thereof. The dairy societies are now also adopting this system and have a credit with the Bank of the State which facilitates their payment to grain growers of sums on account.

TABLE I. — *The Siberian Dairy Societies in* 1907-1917.

	1907	1908	1909	1910
(1) No. of co-operative societies belonging to the Union . . .	13	77	128	215
(2) No. of dairies.	12	65	108	181
(3) No. of shops	1	12	20	34
(4) No. of offices	—	2	3	5
(5) Average no. of co-operative societies per shop	—	38	43	43
(6) Average no. of shops per office.	—	6	7	7
(7) Average no. of dairies per office.	—	32	36	36
(8) Production of Union (roubles)	—	115,983	157,742	270,651
(9) Average production of a dairy society. . . . . (roubles)	—	1,784	1,461	1,495
(10) Sales of foodstuffs . "	—	17,000	17,800	274,000
(11) Total sales of goods "	—	127,000	183,000	315,000
(12) Average sales per shop "	—	10,583	9,150	9,246
(13) Sales of the Union. . "	—	2,380,000	2,934,000	4,355,000
(14) Average sales per office "	—	1,290,000	987,000	871,000
(15) Average sales per society "	—	30,900	22,900	20,251

TABLE II. — *Quantity and price of butter exported from Siberia in* 1908-1917.

Year	Gross quantity	Net quantity	Quantity produced by Union	Percentage
1908	3,441,960	2,840,756	115,983	4 %
1909	3,533,691	2,980,878	157,742	5.3 %
1910	3,888,456	3,195,267	270,651	8 4 %
1911	4,310,126	3,848,300	287,462	4.8 %
1912	4,533,362	4,047,600	431,111	10.6 %
1913	4,680,159	4,442,700	613,462	13.7 %
1914	4,975,869	4,585,800	678,793	20 6 %
1915	5,166,000	4,612,500	818,396	17.7 %
1916	3,555,328	3,174,424	664,856	20.9 %
1917	3,943,520	3,521,000	957,319	26.9 %

Year	Produced by the Union	Percent. of total so produced	Price of butter produced by the Union
1908	130,721	4.6 %	1,880,670.39
1909	190,138	6.3 %	2,330,916.04
1910	270,985	8.4 %	3,597,105.24
1911	281,059	7.3 %	3,795,850.73
1912	461,471	11.3 %	6,081,934.65
1913	630,922	14.2 %	6,614,604.00
1914	678,793	20.6 %	7,043,432.39
1915	1,308,829	28.2 %	16,349,115.69
1916	2.942.307	92.6 %	58,595,264.44
1917	2,514,622	71.4 %	123,163,843.00

The union's organs are the general meeting of members and the board of management. The general meeting meets annually and is composed of representatives of the adherent dairies. Every delegate present represents ten co-operative societies and is elected by all the dairies in his district. The board of management is elected for three years by the members of the co-operative societies. Dairy societies and other consumers' societies but not private persons are qualified to become members of the union. The members of the dairy societies must be farmers but the co-operative consumers' societies are open to all inhabitants of the village in general. Every new dairy joining the union must acquire shares for at least 100 roubles and pay 10 roubles to the reserve fund. It consents to the transference of the management of its affairs to the union which becomes responsible for them.

The union has its own instructors and experts who must advise and help each dairy with regard to the most modern and scientific methods of buttermaking which can be adopted.

We have already noticed that in Siberia co-operative activity is not limited to dairy societies. The efforts made to extend co-operative production to cheesemaking, to organize the exportation of eggs, etc., leave no doubt that the Siberian peasants will eventually undertake several branches of agricultural production and of the grain trade. In the meanwhile it may be said that almost the entire Siberian dairy industry is co-operatively organized.

The saving which Siberian peasants effect by means of the co-operative societies reaches two and a half million roubles a year. The vast extent of the lands of Western Siberia and their natural pasturelands have favoured above all the developemnt of the dairy industry. While in European Russia there were about 200 dairies in 1911, the number of them existing contemporaneously in Siberia reached 1400. Among the members of the dairies there are about 22,000 peasant proprietors.

The remarkable development of buttermaking in Siberia is certainly not due to chance. The rural population of the country is in incomparably

easier circumstance than the peasants of European Russia. This situation of theirs opened up to the Siberian farms the possibility of profitable stock farming, so that each peasant family owns on an average four cows, a condition not found among the peasants of Central Russia. The Trans-Siberian Railway, constructed in the last decade of last century, gave a powerful impulse to agriculture and industry in Siberia.

Foreign capital has also contributed to the progress of Siberian dairies, and this is one of the chief reasons for the large development of this branch of agricultural co-operation.

In order better to illustrate the evolution of the dairy societies in Siberia their history can be divided into four great periods.

The first begins in 1895 and ends in 1897. It is concerned with the first attempts to establish the dairy industry on capitalist bases. The second period includes the years from 1898 to 1902 in which there was a lively competition between private producers and the first pioneers of co-operative principles. In this period the first dairy societies arose. The third period covers about five years, from 1902 to 1907: the dairy societies in West Siberia spread rapidly; the first attempts to form a union of the co-operative societies of milk producers took place. Finaly 1908 was the year of the incontestable triumph of Siberian agricultural co-operation: the Union of Siberian Dairy Societies and the Union of Co-operative Societies of the Altai District were founded. These powerful organizations absorb a large number of single dairy societies. The victory of the co-operative principle over private speculation is the most complete and decisive for which it was ever possible to hope.

The following table illustrates the extraordinary progress of which Siberian co-operation can justly boast. The figures we reproduce come from the most trustworthy statistical data as to the provinces of Tomsk and Tobolsk:

Year	Total No of dairies	No. of co-operative societies	Percent. of societies formed by dairies
1896	29	5	17
1900	1,022	32	3
1902	1,980	60	3
1905	1,943	347	18
1910	3,109	1,337	43

The principles to which the dairies conform are the following:

(1) In the first place the society adopts the rules prepared by the Union of Siberian Dairy Societies.

(2) The milk the society produces is delivered to the union exclusively.

(3) All the society's arrangements for the acquisition of necessary material must be made by the medium of the union.

(4) In case of a breach of any of the three preceding rules a fine of 500 roubles is paid.

(5) A given society is obliged to conform to all the resolutions of the Union's general meeting passed before its entry into the union.

(6) A co-operative society considers that it has a liability up to half a rouble per pud of butter produced in the previous years.

(7) A co-operative society elects persons to represent it legally.

These rules form the union's fundamental basis. Every co-operative society pays an admission fee of 10 roubles and 100 roubles for every one of the union's shares it acquires. Local conditions and the vastness of the country have called a quantity of various co-operative societies into existence.

The progress realized by the union appears in a table reproduced on page 124 of our issue for February 1918.

The co-operative societies in Siberia have also opened up new roads to co-operation in that they have taken an interest in industries which have hitherto been looked upon almost as the monopoly of private enterprise. And since industrial development is here still at its beginning, the productive activity of co-operative societies is profitably maintained in the country. A few examples will suffice to give an idea of the efficient manner in which Siberian co-operators discharge their economic task.

The Union of the Co-operative Societies of Altai possesses its own soap factory which has succeeded in supplying the finest toilet-soap. The association known as the Co-operator of Tomsk acquired rope-walks worth 100,000 roubles, and installed a factory of felt boots. The co-operative society in the province of Enissei acquired a mill. The Federation of the Co-operative Credit Societies in the province of Binsk possesses vast premises in the town of Nivo-Nikolaievsk in which it has installed engineering works for the repair of agricultural machinery. This federation began the foundation of a whole series of establishments for producing articles of immediate use to farmers and beekeepers. The Federation of the Co-operative Societies of Pavlodarsk applied to the government for the lease of the saltmines which were in private management.

The programme of the industrial enterprise of the Federation of the Co-operative Societies of West Siberia is wider still. It provides for the instalment of a soap factory, worth 50,000 roubles, works for the extraction of salt worth 35,000 roubles, for some fur and leather works worth 350,000 roubles, for cotton mills in Omsk worth 150,000 roubles, and for engineering works for the repair of agricultural machinery of the same value. This federation has set aside 50,000 roubles for the extension of various local industries connected with the realization of the value of the natural resources of this country, which abounds in virgin forests and offers the best conditions to the timber industry, the liquid resin and turpentine extracting industries, etc. Finally, this Federation of the Co-operative Societies of West Siberia has appropriated 100,000 roubles to the acquisition of barges and boats for the transport of its products, thus combating the arbitrary raising of tariffs by navigation companies. The

working of the mines of precious metals, coal and iron is also contemplated as an item of the vast programme of this federation.

The Siberian co-operators take an interest in the development of all the local industries. It is well known that the Central Federation of the Co-operative Credit Societies in Novo-Nikolaievsk and also the Altai Federation have opened special offices for the study of problems connected with the increase of agricultural production. Important sums were set aside for free agricultural propaganda, agronomic studies and the publication of leaflets of agricultural and commercial information.

The Federation of Co-operative Societies in West Siberia also has an office of commercial and economic studies for making enquiries into the agricultural situation, the increase of small home industries, and co-operative organization.

The co-operative societies also look after popular education. It is a fact characteristic of the spirit animating the Siberian co-operative movement that the Federation of the Rural Co-operative Societies of Cerepanova has set aside 3,000 roubles for the opening of an agricultural school in its district; and has moreover not limited itself to agricultural instruction but has opened an elementary school, appropriating 500 roubles to a People's House. The Federation of the Co-operative Societies of Altai has formed a special Central Committee of Popular Education which energetically carries on a beneficent work. The education fund of the federations of Altai, which include co-operative credit and the co-operative consumers' societies, amounts to quite 70,000 roubles.

This various activity is supported by much propaganda work. The federation publishes for this purpose a paper called "Narodnaja Gazzetta" (Popular Gazette), printed by its own press. Finally, the federation maintains 42 instructors to spread information as to its programme of co-operation to the most remote parts of the country.

§ 2. The Purchases and Sales Union of Siberian Co-operative Societies.

In recent years the co-operative movement in Siberia has attained to a superior form of organization represented by the "Purchases and Sales Union" (*Zakupsbyt*) which was constituted on 1 May 1916 at the Congress of Siberian Co-operation. The new union aims at uniting and co-ordinating the co-operative societies scattered over the whole country from the Ural Mountains to the Pacific.

The Purchases and Sales Union constitutes the centre of the co-operative federations, each of which represents a group of local co-operative societies which retain complete autonomy as regards internal administration. The Purchases and Sales Union is therefore like an association of individual federations conforming to the resolutions of their respective meetings. The central union is liable for losses to the whole extent of its pro-

perty, while the supplementary liability of each affiliated co-operative association extends to ten times the value of the shares it possesses.

The activity of the Purchases and Sales Union extends into various fields of trade, education and organization. Although a private institution, it works in such a manner that it has a notable influence on the economic policy of the organs of the State. A precise idea of the work and duties of the Purchases and Sales Union can be obtained by considering its offices in the town of Novo-Nikolaievsk. They are the following :

(1) *The Trade Office* which classifies the orders of affiliated co-operative associations, fulfils them, places itself in relation with the contracting firms, buys necessary goods, and supervises the business of all the union's agencies.

(2) *The Revising Office* which provides for the auditing of the central office's books, the instruction in book-keeping of the auditing offices of the single associations, the study of affiliated associations' systems of book-keeping and commercial management, the summoning of meetings of the auditors of the trade books of the associations, and the auditing of the books of all the offices of the Purchases and Sales Union.

(3) *The Finance Committee* which studies questions of a financial character regarding the Purchases and Sales Union, supervises its financial position and co-ordinates the activity of the central management with that of the affiliated federations.

(4) *The Dairies Office* gives instructions to the affiliated dairies, co-ordinates the systems of manufacturing and consigning butter, acquires all accessory articles, studies means of improving production, institutes and supervises special schools, as for example the Higher Dairy School, and markets both at home and abroad the butter produced.

(5) The *Fisheries Office* organizes the river and sea fishing of Siberia, seeks to improve fishing methods, distributes fish in the various regions of Siberia and in European Russia, acquires fishermen's requisites, organizes co-operative societies among populations living by fishing and other fishermen's mutual aid associations.

(6) *The Raw Materials Office* instructs the affiliated co-operative federations, and supervises the buying and marketing of raw material on home and foreign markets.

(7) *The Industries Office* prepares and works out schemes for the industrial programmes of the co-operative federations, instructing them in all matters regarding industrial enterprise, co-ordinating their activity and supervising their various industrial establishments.

(8) *The Information Office* collects and classifies information as to all the Purchases and Sales Union's fields of activity, basing itself on the reports received from the commercial agents, the local offices, the secretaries of the co-operative associations concerned and finally the general press. It distributes the material thus collected among the single co-operative societies with the object of co-ordinating their commercial activity.

(9) *The Transport Office* which has the duty of studying methods of facilitating the strictest relations with the local authorities, preparing a programme for the transport and consignment of merchandise on a large

scale, and drawing up time-tables for the railways and tariffs for the roads of communication belonging to the State and the communes.

(10) *The Secretarial Office* which instructs the co-operative unions as to their programmes of internal organization, provides them with books and other means of instruction, opens schools and co-operative societies, holds courses of lectures, publishes a monthly co-operative review for Siberia, maintains a co-operative library, disseminates pamphlets and leaflets of propaganda, organizes statistical enquiries, co-ordinating the statistical material supplied by the various co-operative societies, gives advice in legal cases by means of consulting lawyers, helping co-operative societies in all their legal business, makes enquiries into the laws governing co-operation, takes part in meetings treating of these subjects, and keeps the agricultural class informed as to all questions which can interest it in its relations with authorities.

(11) *The Foreign Office* which supervises the agencies instituted abroad, collects and classifies information and data as to the world's markets, acquires and distributes foreign securities to provide for the most urgent payments, drafts bills for the regulation of the commercial exchange between Siberia and foreign countries, takes part in meetings and conferences concerned with the supervision of importation and exportation.

(12) *The Economic Council* which makes enquiries as to all economic problems relative to co-operation, prepares bills on this subject, takes part in conferences on economic problems, and regulates the economic policy of the affiliated co-operative federations.

The vast activity of the Purchases and Sales Union is distributed among these twelve offices, on the principles of specialization and of the strict selection of the technical and consulting staff. The Economic Council is composed not only of such consulting experts as professors of political economy and kindred subjects, but also of representatives of the various offices, and thus it is an auxiliary organization which helps the central management in all its far-reaching work. Each office is managed by a member of the central board of management. In the same way the managers of the most important agencies of the Purchases and Sales Union, as for example the Moscow agency and the agencies founded abroad, belong to the central board of management. The latter is appointed by the delegates of the individual co-operative federations at their annual meetings, and constitutes the central managing body of the Purchases and Sales Unions.

The co-operative federations belonging to the Purchases and Sales Union act as its local agencies. Hitherto such agencies, beginning with the chief among them which is at Moscow and which acts as a central agency for European Russia, having a staff of commercial travellers who visit all the markets of Russia, have been instituted in the following towns: in European Russia at Nijni-Novgorod, Ekaterinburg, Kungr and Sarapul; in Siberia at Irkutsk, Blagovieshtchensk, Charbin, Vladivostock, Nicolaievsk, and abroad at London, New York and Copenhagen, the London agency being the principal foreign agency.

The Purchases and Sales Union has initiated a new era in the history

of the co-operative movement in Siberia. The period which preceded its organization was characterized by an almost absolute lack of co-ordination among the different co-operative societies, in consequence of which the financial position of the whole co-operative movement suffered much. Moreover, the ignorance on the part of Siberian co-operative societies of modern methods of marketing agricultural produce greatly weakened the movement in its competition with private enterprise. The co-operative federations affiliated to the Purchases and Sales Union find themselves today in a position to exercise a growing influence on the State authorities, independently of the form of the government which has changed several times in recent years. In the sphere of trade the Purchases and Sales Union introduced discipline and order into the business of acquiring and marketing produce as profitably as possible.

Value of the goods supplied to the Unions.

	20 May 1916 to 1 July 1918	Total
July	76,545 47 roubles	
August	77,458.33 »	
September	290,820.31 »	
October	590,761.17 »	
November	617,270.59 »	
December	670,648.81 »	
	1 102,763.71 »	
		3,426,068.39 roubles
1917 January	1,145,380.01 »	
February	716,196.84 »	
March	821,280.06 »	
April	1,881,564.00 »	
May	4,015,204.25 »	
June	2,601,349.42 »	
July	2,996,578.35 »	
August	1,686,424.54 »	
September	2,666,798.79 »	
October	3,863,994.94 »	
November	8,659,275.80 »	
December	8 955,464.54	
		40,009,491.54 roubles
1918 January, February, March and April		27,369,931.26 roubles
Total for 23 months and 10 days		71,805,491.19 roubles

The business of the Purchases and Sales Union has reached an unhoped-for figure. It is enough to state that this union acquired about 1,700 tons of tea, and, among other articles, large quantities of wicks and lucifer matches.

The vicissitudes through which Russia has lately passed have had their sad reaction in Siberia and have impeded the development of the Purchases and Sales Union, but there is question only of a period of temporary arrest whence the co-operative movement will issue stronger and more fully alive than before.

To be convinced of this it is enough to look at the preceding table which illustrates the progress made by the Purchase and Sales Union in the twenty-three months before 1 July 1918

The figure now standing for sales is, according to information which reached us in May 1918, 27,370,000 roubles. Goods were bought for a further sum of 30,000,000 roubles at the same date, but because of delays due to reasons of a technical character they could not be included in the May balance-sheet. It can thus be calculated that the operations of the Purchases and Sales Union in the period of 23 months and 10 days exceeded 100,000,000 roubles.

Business concluded in the first four months of the year exceeded that anticipated by the Purchases and Sales Union for the whole of 1918, namely 75,000,000 roubles. Taking into account the prospects which are opening up in Siberia, it can be concluded that the Purchases and Sales Union, which has already secured an absolute predominance in the agricultural trade of this vast district, will have a balance-sheet dealing with hundreds of millions of roubles, thus signalizing the triumph of the co-operative movement.

If purchases were enormous, the marketing of agricultural produce is destined to surpass the figures reached hitherto. No sooner will normal conditions have been re-established in Russia, and the export of raw material and agricultural produce have been rendered possible, than operations of sale will assume immense proportions.

When the Purchases and Sales Union was constituted it was feared that it might be a burden on the balance-sheets of the individual affiliated co-operative associations But the balance-sheet of 1917 shows that such fears were unfounded.

According to our information as to 1918, the Purchases and Sales Union includes 8,362 producers' and consumers' co-operative associations, to which 1,728,050 families belong. Today the real figure would certainly be greater, and it may be taken to exceed two million. But even if we limit ourselves to the figures given, and consider each family as composed of only two persons, we must admit that the Purchases and Sales Union includes much more than five million persons, while, if we accept as very probable an increase of membership in 1918, we must calculate that a population of from seven to eight million persons is organized in co-operative societies.

The capital of the Purchases and Sales Union is constituted by the

contributions of the affiliated federations and comprises: (1) a fixed contribution proportionate to the federation's paid-up capital; (2) ½ per cent. on the business it concludes with the Purchases and Sales Union; (3) a member's contribution of 2,000 roubles from each affiliated federation. The capital of the Purchases and Sales Union, which amounts to exactly 844,948 roubles, consists of:

Capital formed by the federations' subscriptions of 2,000 roubles each	45,000 roubles
Contribution from the capital of the affiliated federations	258,945 »
Commission of ½ per cent. on business	540,452 »
From profits in 1916	551 »
Total . . .	844,948 roubles

But these figures have certainly been surpassed by this time. At the meeting of the Purchases and Sales Union held in March 1918 it was decided to increase financial resources without departing from the principle of levying contributions on operations and without raising the amounts of contributions. About May 1918 the capital amounted to some 4,000,000 roubles and was made up of the reserve fund, the industrial fund and the guarantee fund On 1 January 1916 its total amount was 9,750 roubles, on 1 January 1917 it was 2,166,914 roubles, and on 1 May 1918 it was 3,917,973 roubles.

In the field of Siberian agriculture private enterprise has been entirely surpassed and overwhelmed. The exclusion of the parasitic trade which has been the chief work of co-operation made the co-operative movement completely the master of the situation as early as March 1917, where the marketing of agricultural produce and the acquisition of necessaries for the agricultural class were concerned. Private trade proved itself to be entirely incapable of adapting itself to the new economic conditions. An urgent need was felt to provide continual supplies at the places of production, and only an organization which possessed a vast network of scattered agencies could supply the population with the articles of largest consumption. This organization could be none other than the co-operative organization which had arisen out of the fusion of thousands of single co-operative societies.

Siberian co-operation has sustained the ordeal by fire, for it has succeeded not only in acquiring and distributing large quantities of merchandise but also in introducing order and efficiency into selling methods.

If co-operation has been able to accomplish such a task in an exceptional time, it has nothing to fear for the future. The history of the Purchases and Sales Union is very instructive in this respect and inspires the strongest confidence in the vital force of Siberian co-operation.

Part II: Insurance and Thrift

BELGIUM.

MUTUAL INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR IN 1917.

SOURCE:

BOERENBOND BELGE OU LIGUE DES PAYSANS. Exercice 1917: Rapport succinctement présente à l'assemblée générale du 20 mai 1918 par le chanoine Luytgaerens, secrétaire général. Annexe (*Belgian Boerenbond or Peasants' League. Year 1917: Short Report presented to the General Meeting of 20 May 1918 by Canon Luytgaerens, General Secretary Appendix*). Louvain, 1918.

As we showed in a former issue (1) the Belgian law of 24 December 1903 as to the accidents of labour is, where agriculture is concerned, applicable to three kinds of enterprises. There are first the enterprises, whatever be their degree of importance, in which machinery having a motive force other than that supplied by men or animals is in permanent use. Enterprises of forestry must be added to this first class.

Next come farms on which at least three men are habitually employed.

In the third place Article 3 of the law lays down that those at the head of enterprises which are not subject to the law may voluntarily come within its scope by making a special declaration to the clerk of the justice of the peace of the place in which the enterprise in question is situated. In this class are small holdings, and market gardens on which either vegetables or flowers are grown, whatever be their importance, so long as no machinery propelled by mechanical power is used on them.

Belgian agriculture has at its disposal, in order to cover these various risks, two mutual insurance companies founded by common agreement by the several agricultural federations of the country. The *Caisse commune d'assurance des cultivateurs belges* (Company for the Insurance in Common of Belgian Farmers) insures the workpeople of the farmers and the persons carrying on small rural industries who come within the scope of the law of 24 December 1903. The *Assurance agricole* (Agricultural Insurance) insures farmers against accidents entailing civil liability, and also completely insures the heads of enterprises outside the scope of the aforesaid law.

(1) See our issue for February 1914 (*Monthly Bulletin of Economic and Social Intelligence*).

The war has naturally had an increasingly deleterious influence on insurance business: there have been few new contracts; many policies have been suspended or annulled; many premiums have remained unpaid; the verification of accidents has been defective; agricultural wages have increased without a proportionate increase of premiums; travelling and managing costs have become a heavier and heavier charge on the budget. The most that has been attempted has been the maintenance of the *status quo* of the insuring institutions.

As regards this point, the *Caisse commune* and the *Assurance agricole* have gained more policies than they have lost, and we find, even if for a moment we consider as non-existent the insurance which is only temporarily suspended, in the case of the *Assurance agricole* a marked progress and a comparatively unimportant retrogression in that of the *Caisse commune*.

The number of accidents has kept within normal limits and the financial burdens they have occasioned have slightly diminished, although a generous use has been made of reserves in making settlements.

All the unpaid premiums of 1915, 1916, and, as far as was necessary, of 1914, were covered by the reserve for unrecoverable premiums; and in anticipation of the unrecoverable payments of 1917 this reserve was increased by a sum equal to the amount of the unpaid premiums of 1916.

It was possible to increase the reserves providing for a decrease in the value of invested sums by about 125,000 francs, and the balance of the *Caisse commune* and of the *Assurance agricole* nevertheless exceeds 10 per cent. of the premiums. This balance went, after the distribution, to swell the funds of the reserve premiums. Thus we find that, far from being shaken, the financial position of these companies has been strengthened during the war.

In the following paragraphs we will examine the results obtained by each of these societies more closely.

§ 1. The "Caisse commune d'assurance des cultivateurs belges"

Total Business Done. — The number of new insurances has diminished in a measure shown in the following table:

Year	Applications received	Contracts concluded	Number of hectares	Wages	Assets
				francs	francs
1913	1,842	1,479	27,938 05	1,861,935.00	116,439.20
1914	1,639	1,225	16,198.70	1,525,620.00	71,543.00
1915	564	515	9,708.80	803,390.00	41,824.10
1916	516	456	7,503.40	672,740.00	35,363.60
1917	412	322	6,727.20	390,844.00	25,002.45

83 current policies have been annulled but replaced by others, and 213 have ceased to exist, partly however only for the duration of the war. The corresponding figures for 1916 were 160 and 512. Compared with the preceding year there has therefore been a progress represented by 26 policies bearing on 397.42 hectares, 180,870 francs of wages and assets amounting to 9,818.05 francs.

The following table shows the development of the business of the *Caisse commune* in the five years from 1913 to 1917 :

Year	Number of policies	Hectares	Wages	Paid-up assets	Premiums
			francs	francs	francs
1913	9,377	157,284.92	8,252,248	496,514.05	485,697.84
1914	9,396	157,274.21	8,686,799	506,048.30	418,039.29
1915	9,248	156,864.10	8,759,635	509,060 50	382,725.29
1916	9,032	156,633.78	8,670,240	518,607 95	395,605.81
1917	9,058	157,031.20	8,851,110	524,775.25	390,200 05

When the company's first year of business, 1906, closed, there were in force 8,098 policies bearing on 160,764.05 hectares, 4,556,898 francs of wages, 326,749.76 francs of paid up assets and 321,079.44 francs of premiums.

Two reservations should however be made with regard to the figures we have given for the years of war :

1. The situation in West Flanders is unknown. Many insurances current at the outbreak of the war must since have ceased to exist. On this account the figures are inexact to a degree which the future will reveal.

2. Many insurances temporarily suspended because of the war have been included in the figures. This also implies a lack of strict exactness, and the fact must be made clear because, as appears from the following table, there is question of very large figures :

	Years	Policies	Hectares	Wages	Assets
				francs	francs
Temporary annulments and suspensions in	1917	280	72 60	605,525	18,532.90
	1916	459	91.00	789,805	27,736.50
	1915	231	45.00	514,350	13,172.10
Total since the outbreak of war . .		970	208.60	1,909,680	59,441.50
Renewals since 1914.		35	14.00	71,300	2,229.40
Leaving . . .		935	194.60	1,838,380	57,212 10

Accidents. — The year 1917 was fairly favourable, as regards both the number of the accidents and their consequences and the financial burdens they imposed.

The accidents occurring during the last five years reached the following numbers:

in 1913	2,858
in 1914	2,070
in 1915	1,198
in 1916	1,401
in 1917	1,349

The fact that trade and industry have been arrested appears from the statistics as to the causes and consequences of accidents, statistics which we cannot dream of reproducing here. As compared with 1916 the number of accidents of agriculture increased by 15 in 1917 while those of industry diminished by 67.

It seems well to bring out in the following table the particular information we gather from the statistics as to the relation between the causes of the accidents on the one hand and their number and financial consequences on the other:

		Percent. of cases	Percent. of cost
Agriculture	Animals	16.23	17.47
	Yokes of animals	5.99	11.05
		22.22	28.52
	Fall of victim	28.60	28.11
	Fall of inanimate objects	4.54	3.62
		33.14	31.73
Industry.	Sharp instruments	15.65	8.09
	Fall of victim	18.47	12.47
	Fall of inanimate objects	14.01	8.59
		32.48	21.06
	Sharp instruments	14.33	25.99
	Machines	4.78	25.28

In industry the accidents due to machinery were particularly serious: more than a quarter of the costs were occasioned by a remarkably small number of accidents of this kind.

The average charge per accident, calculated for all the accidents indiscriminately, shows a reduction since the previous year. Each accident cost on the average:

In 1913	121.45 francs
» 1914	147.41 »
» 1915	171.81 »
» 1916	207.81 »
» 1917	171.01 »

On the other hand, the average cost entailed by less important accidents has increased, a circumstance which can to some extent be attributed to the fact that the number of fatal accidents occasioning the payment of benefits in capital was less, and that the cases of permanent disablement were fewer and did not entail excessive incapacity for work. Another cause for the increase is probably found in the frequently exaggerated estimate of wages, principally wages in kind, and in the impossibility of bringing these estimates down to the true value of wages in every case.

As has been said, cases of permanent disablement and death were not over numerous, as appears from the following comparison with the four preceding years:

Year	Cases of permanent disablement	Cases of death
1913	65	18
1914	55	13
1915	57	10
1916	58	11
1917	46	9

Disputes between the sufferers by accidents and the company arose only in the cases of permanent disablement: of 27 cases of serious accidents for which settlement was made in 1917, eight gave rise to a lawsuit, either the rate of yearly wages or the degree of disablement being disputed.

To estimate at their right value the financial burdens imposed by the accidents the fact must not be lost sight of that the figures mentioned include very large sums which should serve as reserves for the cases in which settlement has yet to be made. Only when this is borne in mind can a comparison be made between the following figures which refer to the two fields of this company's activity:

Risks	Years	Policies		Accidents	
		Number	Premiums francs	Number	Cost francs
Agriculture	1915	6,324	285,548.24	925	137,912.31
	1916	6,152	291,722.31	1,020	200,283.27
	1917	6,230	295,040.05	1,035	189,030.76
Trade – Industry . . .	1915	2,924	97,177.05	273	67,920.12
	1916	2,880	103,883.50	381	84,306.98
	1917	2,828	95,160 60	314	41,667.55

§ 2 THE "ASSURANCE AGRICOLE".

Total Business Done — In 1917 the *Assurance agricole* made marked progress. Its position is far from being as brilliant as it was before the war, but an improvement is noted none the less, and it appears from the following table.

Year	Applications received	Contracts concluded	Number of hectares	Wages	Assets
				francs	francs
1913	5,114	4,130	54,901.40	1,624,865.00	121,876.40
1914	5,097	4,062	40,091.20	1,265,900.00	98,363.70
1915	1,554	1,401	18,524.30	627,615.00	37,103.70
1916	1,737	1,586	18,431.00	608,540.00	45,166.20
1917	1,876	1,534	18,607.56	457,400.00	50,369.00

On the other hand a certain number of policies were annulled or replaced by others. and the net increase was in consequence only one of 869 policies, 8,454.98 hectares, 274,450 francs of wages and 33,992 francs of assets.

The corresponding figures for 1916 were 508 policies, 6,019.20 hectares, 86,845 francs of wages and 17,531.10 francs of assets. The comparison is all to the advantage of 1917.

Unfortunately, owing to cessation of business, requisition of horses, etc., many insurances had once more to be suspended temporarily, and a part of the ground gained was thus lost.

	Policies	Hectares	Wages	Assets
			francs	francs
Temporary annulement and suspensions in 1917	222	136.00	345,710	14,174 20
do in 1916	410	226.80	440,780	17,815.70
Suspensions in 1915	190	67.10	280,725	7,533.70
Total since outbreak of war	822	429.96	1,067,215	39,523.00
Renewals in 1916 and 1917	21	—	30,900	701.50
Leaving	801	429.96	1,036,315	38,822.10

The following table shows the total business done by the company in 1906 and in recent years. The figures for 1915, 1916 and 1917 are given

with every reservation, for it is impossible to known how many of the thousands of policies previously current in West Flanders will subsist after the war

Years	Number of policies	Hectares	Wages (agricultural industries)	Paid up assets	Premiums
				francs	francs
1906	10,204	170,922.23	3,421,969	213,192.09	195,8.6 95
1913	20,790	263,005 63	6,780,589	511 529 15	480,802 75
1914	22,463	275,781.03	7,188,922	549.807.85	522,345 28
1915	22,831	281,260 70	7,250,776	562,685.00	526,650..8
1916	23,339	287,279.90	7,337,621	582,717.65	530,498.13
1917	24,208	295,734 88	7,612,071	612,413.85	546,317 07

Accidents. — The number of accidents slightly increased during 1917 : there were 191 more of them than in 1916.

The following figures give the number of accidents in the last five years.

1906	3,038
1914	2,776
1915	1,996
1916	2,073
1917	2,264

However in 1917 there were only 52 cases of permanent disablement as against 65 in 1916, and 11 cases of deaths as against 16 in 1916.

The annual statistics as to the causes and consequences of accidents are not very instructive. The only fact worthy of remark is that accidents entailing civil liability are caused almost exclusively by animals and vehicles.

Part III: Credit

FRANCE.

CREDIT FOR THE ACQUISITION OF SMALL RURAL HOLDINGS BY MILITARY PENSIONERS AND BY CIVILIANS WHO HAVE SUFFERED BY THE WAR

OFFICIAL SOURCES

LAW OF 9 APRIL 1918 as to the acquisition of small rural holdings by military pensioners and by civilians who have suffered by the war

PUBLIC EXECUTIVE REGULATION of 19 JULY 1918 as to the conditions in which this law is to be applied

INSTRUCTIONS OF THE MINISTERS OF AGRICULTURE VICTUALLING LABOUR AND SOCIAL THRIFT as to the execution of this law dated 31 July 1918

The law of 9 April 1918 which arose out of various proposals in Parliament, aims at an exceptional and privileged diffusion of small holdings for the benefit of persons who have suffered by the war

It therefore authorizes societies affording credit on real estate and agricultural credit to grant to the beneficiaries enumerated in its first articles individual mortgage loans to facilitate the acquisition, organization, transformation and reconstitution of small rural holdings of a value not exceeding 10,000 francs exclusively of costs and the insurance premium, whatever be their area

These loans are granted by the societies affording credit on real estate and agricultural credit at a reduced rate of interest, with the help of funds which the State advances to these societies without interest

We will examine successively the machinery for making (1) loans, (2) State advances

§ 1 THE TERMS OF LOANS

(1) *The Grantees of the Loans* — The persons receiving the loans are

(*a*) Old soldiers and sailors having the right to State disablement pensions, because of wounds they have received or infirmities they have contracted during the war,

(*b*) Widows in receipt of pensions or compensatory life annuities paid by the State or the *Caisse de prévoyance des marins français,* on account of the death of their husbands or of wounds received or illnesses contracted during the war;

(*c*) Persons having a right to compensatory annuities or pensions paid by the State or the *Caisse de prévoyance des marins français* because of losses they have incurred in consequence of the war.

To sum up: only persons having a right to pensions or compensatory life annuities can claim the benefit of the loans, and all persons having a right to allowances or compensation not due for the duration of their lives are excluded therefrom because they cannot give the security which Article 3 of § 2 and the following articles make obligatory for borrowers.

(2) *Object of the Loans.* — The first article of the law defines the object of the loans as follows: they are intended to " facilitate the acquisition, organization, transformation and reconstitution of small rural holdings ". It is understood that the purchase of stock and material is included among the operations covered by the term " organization " of small rural holdings. Such purchase is for that matter definitely contemplated by Article 6 of the executive regulation. Loans can therefore be made for the repayment of the price not only of the properties which the law's beneficiaries acquire but also of the stock and material necessary to bringing these properties to a productive state.

(3) *The Amount and the Duration of the Loans.* — The previous law (of 19 March 1910) allowed societies affording agricultural credit to grant loans only up to the amount of 8,000 francs. Moreover the law of 10 April 1908 had limited to an area of one hectare and a value of 1200 francs the fields and gardens which could be acquired through the medium of societies granting credit on real estate. A law of 11 February 1914 had further authorized these societies to make loans to small farmers desirous of adding a stable, barn or similar building to their houses. These complementary loans might not exceed the sum of 2,000 francs. This legislation was thought in rural circles to be too narrow: it did not allow the acquisition of a real farm capable of supporting a farming family.

The loans granted as by the first article of the new law may amount to 10,000 francs, exclusively of costs and the insurance premium.

Unlike the law of 10 April 1908, the new law does not limit the area of the property for which the loan is made.

The period of repayment may not exceed twenty-five years, and the borrower may not be more than sixty years old when the last instalment is paid. Thus a loan for a maximum period of 25 years may be made to a man not over thirty-five years of age; and the term diminishes gradually for older borrowers, a man of forty being able to borrow for only 20 years, a man of forty-five for 15, etc.

(4) *Rate of Interest. Repayment by Annual Instalments.* — The interest on the loan is at the privileged rate of only 1 per cent. The capital must be repaid while the loan is current, the instalment repaid each year con-

stituting a sinking fund. The interest plus this annual instalment makes the sum which the borrower must pay each year.

A man receiving a loan of 10,000 francs for five years must pay 2,060.40 francs a year; if his loan is for ten years he pays 1055.82 francs a year; if it is for twenty-five years he pays 454.06 francs a year.

(5) *Security and Conditions of Loans.* — (*a*) The first security of the loan is the mortgage. This mortgage is on the property for which the loan is made and is granted by a notary's deed. Mortgages to the lending bank or society have a precedence over legal mortgages

(*b*) Further, by Article 2 of the law, the borrower must, in order to secure the payment of the annual instalments in case of his premature death, insure with the *Caisse nationale d'assurance* for a single premium payable to the lending society.

In conformity with Article of 2 of the executive regulation, the borrower must produce with his application for a loan a certificate of the *Caisse nationale d'assurance* showing that he has been accepted by it, after medical examination, for the insurance for which the law provides.

Owing to the inexperience of the borrowers it is advisable in every respect that the societies granting credit on real estate and agricultural credit act as intermediaries between the insured and the *Caisse nationale* in all insurance business.

They therefore cause all their future borrowers to fill up an application for insurance drawn up on a printed form procured at the *Caisse des dépôts et consignations* This form is dated and signed by the applicant, who may at the same time give a special power to the credit society from which he is about to obtain a loan to act as his proxy in contracting for the insurance.

The societies must furnish, in support of each application:

(1) A copy, on duty-free paper, of the borrower's birth certificate;

(2) A table showing the sums which will have to be insured if the loan is made.

An official document proving the accuracy of information given as to an applicant's birth may be substituted for his birth certificate

When these papers have been received the *Caisse nationale* asks the applicant to go before the doctor responsible for the medical examination. After this examination, which is made at the applicant's expense, the latter is informed by the *Caisse nationale* as to whether his application has been accepted or rejected.

If it is accepted the insurance must be granted within a period of three months after the medical examination, after which interval the applicant would have to undergo another examination.

(*c*) Article 3 of the law provides further that if the payment of instalments be delayed, the lending societies may have paid to themselves a fifth part of the annual pension due to a debtor, so long as this pension is not reduced by more than half or to a sum less than 360 francs.

The new law introduced an important modification into the system established by the law of 10 April 1908 for the real estate societies. This

latter law benefits only persons who already have savings, loans being allowed only to persons who prove that they own the equivalent of one fifth of the value of the real estate to be bought. For Article 3 of this law enacts that " Each of the borrowers contemplated by Article 2 must fulfil the following conditions : (1) Possess when the mortgage loan is made at least one fifth of the price of the land or house ". The maximum loan is therefore only four fifths of the sum needed for purchase or building. But a wounded man who returns home after a long campaign, and a more or less prolonged stay in hospitals or convalescent depots, will generally have exhausted all his savings and will be unable to prove his possession of that fifth which is a necessary preliminary to his obtaining a loan from a real estate society. Article 3 of the new law therefore dispenses with the necessity for a proof on the part of its beneficiaries that they possess this fraction. The total sum necessary to the acquisition, organization, transformation or reconstitution of a small rural holding worth 10,000 francs can be lent to them.

The exemption from this necessity slightly increases the risks borne by the lending society. Article 3, § 2, therefore allows the society to find a compensatory security in the arrears of the borrower's pension. The deed of loan will contain a conditional assignment of these arrears to provide for the case of a delay in the payment of the annual instalments representing the supplementary fifth lent. The law provides a special procedure for making this assignment effective.

(*d*) The borrower must sign a written engagement himself to farm the mortgaged property (Article 2 of the decree of 19 July 1918). The first article of the law of 10 April 1908 had already made an analogous condition for borrowers from a society granting credit on real estate who wished to acquire a small holding. There is no doubt that the condition of farming by the borrower himself is to be interpreted in the widest manner. It must not be forgotten that the borrowers are men wounded in the war, and the required condition is fulfilled if the farming is done not by the borrower himself but under his direction. Article 8 of the executive regulation even provides for the case in which, owing to exceptional circumstances independent of the borrower's will, the sum lent would not be immediately repayable if the borrower's engagement to farm himself were not observed. The case of incurable disease may be instanced. But the borrowing society must in such a case advise the Department for the General Inspection of Credit and of Agricultural Association subsidized by the Ministry of Agriculture. The committee for which Article 5 of the law provides must then give a favourable opinion and the competent minister must make a decision in conformity therewith.

(*e*) The first article of the law of 9 April 1918 subjects to a special guarantee loans to civilians who have suffered by the war, that is to persons having a right to compensatory annuities or pensions paid by the State or the *Caisse de prévoyance des marins français* because of damages they have incurred by the war. Such persons must prove that they are entered, or must enter themselves, on the list of those insured under the law

of 5 April 1910 as to the old age pensions of working and peasant women, and must conform to the provisions of that law. It is intended thus legally to reserve the benefits of the law, at least in so far as it affects civilians, to persons who have practised or are practising thrift, and at the same time to bring the new law into harmony with previous legislation (Law of 11 February 1914 as to the advances made by societies granting credit on real estate for the acquisition of small holdings, and Article 36 of the law as to the old age pensions of working and peasant women).

(*f*) The lending banks and societies must be assured in advance that the farm's net revenue covers the annual instalment and interest due, and this factor must have weight when the duration of loans is fixed. In order that the borrower may normally free himself from his debt the annual instalment and interest must not exceed the net revenue of his property. Let the case be taken of a man wounded in the war who counts upon his pension to give him a livelihood while the loan lasts and borrows 8,000 francs intended to pay for the holding on which he wishes to establish himself. The net revenue of the holding is about 500 francs. If he ask to have the loan for a term of twenty-five years the sum due from him annually will be 363.25 francs and the revenue of the holding is therefore an amply sufficient security. But if the term he desires be ten years, so that he will have to pay 844.66 francs when the revenue of his holding is only 500 francs, the transaction becomes impossible. In the circumstances the minimum term should be one of eighteen years, so that he would pay 487.86 francs a year, that is to say almost the total net revenue of his holding.

(*g*) The lending banks and societies should also specify in their contracts of loan that buildings, stock and material must always be insured against fire, live stock against risks of mortality, and labourers, if necessary, against risks of accidents. These insurances should be made by preference with the agricultural mutual societies.

As regards insurance against fire, the contract of loan must provide for the transference of the benefit to the account of the lending bank or society, the insurance company or the mutual fire insurance company insuring the buildings being notified.

(*h*) A last condition is, in the first place, that borrowers from agricultural credit societies must belong to a local agricultural credit bank and an agricultural credit union in order to have the benefit of loans under the law of 9 April 1918. If they are not already members they must engage themselves in writing to apply for admission to a local agricultural credit bank and an agricultural trade union.

But the lending banks and societies may in some cases deem these measures to be insufficient. Article 4 of the decree of 19 July 1918 allows them to demand from borrowers any other security they think well — mortgages, cautionary deposits, deposited title-deeds, warrants, etc. They must give a list of these supplimentary securities in a rule, binding on themselves, which they issue.

(6) *Insurance Premium and Cost of Realizing a Loan.* — The insurance for a single premium payable in case of death on the one hand, and the cost

of realizing a loan on the other, constitute fairly heavy charges which have to be borne by borrowers. These costs can be advanced by the lending banks or societies and afterwards added to the amount of the loan, even if this loan is already of the maxmium amount provided for, namely 10,000 francs. The sum payable annually is calculated on the total sum thus advanced.

A special mention should here be made of the provision in Article 8 of the law of 9 April 1918 which is only indirectly connected with the proper object of the law. It is desired by this provision to encourage the return to the land not only of men wounded in the war but of all agriculturists who have been mobilized. It rules that deeds of purchase of lands of a maximum vualue of 1200 francs, to be cultivated by the purchasers themselves for ten years, shall, if they be signed within a year of their demobilization by purchasers who are farmers, *métayers* or agricultural labourers and hitherto not landowners, be exempt from conveyance duty and registered gratis.

(7) *Annual Payments.* — The annual payments can be made every year, half-year or even quarter. For the simplification of book-keeping, annual payments seem to be preferred. Since 31 December falls at a time when farmers generally have available funds and also at the end of the budget year, it is the term chosen. In some districts, where funds become available at various times of the year. there is provision for half-yearly payments (30 June, 31 December). Quarterly payments will be only exceptional; they will, for example, be impossible in market-gardening districts. In any case, it belongs to the lending banks and societies to decide this question by their own rules, taking into account kinds of local cultivation and the chief periods at which funds are received.

In the case of every loan it is necessary to draw up in advance a plan for amortization, showing the course of the repayment of the borrowed capital during the various years for which the loans lasts. This plan is indispensable to securing on the one hand that societies keep regular accounts and on the other that borrowers are aware of their engagements. It is also useful to remit a copy of this plan to each borrower and cause him to sign another copy before the loan is paid to him. It is also necessary to send a copy to the minister interested. This plan will be shown on request to the Department of the General inspection of Credit and of Subsidized Associations in order that it may exercise its revisory right.

(9) *Deferring of First Annual Instalment of Repayment.* — The first years, during which installation takes place, are the least productive for farmers. Farms often do not give their maximum yield until after a certain number of years. It may be anticipated that pensioners and civilians who have suffered by the war will sometimes lack the means enabling them to make their first annual payments. Taking this position into account, Article 7 of the decree allows that annual instalments of repayment be unequal in amount in the first three years, or that, exceptionally, the payment of the first year's instalment be deferred until the fourth year of the loan

It is however understood that this adjournment does not in any way affect the term of the loan. Thus if a loan be made for twenty-five years, and the payment of the first instalment of repayment be deferred to the fourth year, the repayment must be completed in the last twenty-two years of the term of the loan, only interest on the borrowed capital, at the rate of 1 per cent., being paid by the borrower in the first three years.

(9) *Loans Paid by Graduated Instalments.* — When loans are to be used for works of organization or transformation spread over a considerable period, or for the provision at intervals of material or live stock, the lending banks and societies are in no way bound to pay the sums they lend immediately and afterwards to exact from the borrowers annual payments calculated on these sums which have not been completely utilized. Article 6 of the decree of 19 July 1918 provides that the amount is paid gradually, keeping pace with the work done or the purchases completed. The state of these works or purchases will be noted in memorials which will govern the payment of the loans. A representative of the lending societies may verify them on the spot, thus allowing the managing committees to take decisions with full knowledge of the state of the case.

The annual payments due from borrowers will be determined in view of this state of affairs. It will be possible either to defer the first instalment of repayment until the year after the full loan has been paid, this adjournment not extending over more than three years, or to calculate the borrower's annual payment, reckoning the several payments of the loan as successive loans, each granted for the time for which the original loan still had to run when it was made.

If we take, for example, a loan of 10,000 francs for twenty-five years which is to enable a property in bad condition to be brought into a good state for cultivation:

The expenditure is to be spread over three years: the borrower needs 3,000 francs immediately and he expects to spend 4,000 francs at the end of the first year, and the remainder of the sum required, namely 3.000 francs, at the end of the second year.

The lending bank or society will lend him:

3,000 francs immediately;
4,000 francs at the end of the first year;
3,000 francs at the end of the second year.

It will really have made three successive loans to the borrower: a loan of 3,000 francs for twenty-five years, a loan of 4,000 francs for twenty-four years and a loan of 3,000 francs for twenty-three years, The annual payments due from him will be the following: 136.22 francs at the end of the first year; 136.22 + 188.29 = 324.51 francs at the end of the second year; and 136.22 + 188.29 + 146.66 = 471.17 francs for the twenty three last years.

If however the borrower prefer to begin repayment before the projected works have been completed and have begun to yield a profit, he will pay from the third year onwards 488.86 francs a payment calculated on a loan of 10,000 francs for twenty-three years; and until the third year he

will pay only 1 per cent. on the sums he has actually received, that is he will pay 30 francs in the first and 70 francs in the second year.

(10) *Allowances for Children.* — In order to favour the building up of homes and encourage large families, the law enacts (Article 6) that 50 centimes per 100 francs borrowed will annually be paid by the State, to form deductions from the annual payments due from the borrower to the lending bank or society, for every legitimate child born to the borrower after he has obtained the loan.

These allowances will be paid by the State to the lending society on behalf of the borrower, who thus will have to pay the society only the difference between such allowance and the annual payment otherwise due from him.

Let us take the example of a loan of 10,000 francs granted for twenty-five years. The annual payment due from the borrower is 454.07 francs.

If a child is afterwards					born to the		borrower	the	State	will pay 50 francs
									he	» » 404.07 »
»	second			»	»	»	»	»	State	» » 100 »
									he	» » 354.07 »
»	third	»		»	»	»	»	»	State	» 150 »
									he	» » 304.07
»	»	sixth	»	»	»	»	»	»	State	» 300 »
									he	» » 154.07 »
»	»	ninth	»	»	»	»	»	»	State	» » 150 »
									he	» » 104.07 »

With the birth of the tenth child the annual payment becomes entirely chargeable to the State.

(11) *Family Property Exempt from Distraint.* — In order to make it easier for the beneficiaries of the new law to turn their small holdings into family properties, as by the law of 12 July 1909, there are in the new law two special provisions.

In response to a wish several times expressed by the representatives of the district banks of agricultural credit, the new law allows (Article 7, § 1) that henceforth when rural holdings are turned into family properties exempt from distraint, the lending society may, if the properties secure individual long-term loans, demand that its lien be placed on the real estate forming the security, and take subsequent action if necessary.

On the other hand the beneficiaries of the new law may, even if they are bachelors and childless, turn into family property exempt from distraint in their own interest "real estate they acquire, organize, transform or reconstitute" in virtue of the law of 9 April 1918, on condition however that they marry within three years of the date of the deed constituting the family property. If this condition be not fulfilled within the required interval of time, all persons interested may apply to have the deed constituting the family property annulled.

(12) *Amendments of Rules. Private Rules.* — In order that the transactions for which the first article of the law of 9 April 1918 provides may take

place, it is indispensable that the lending societies be granted competency by their rules (Article 1 of the decree). In consequence they must if necessary have their rules amended or completed. Most of the societies granting credit on real estate were already empowered by their rules to do business of this kind. The first article of these rules provides that they be governed by the law of 10 Avril 1908 and *subsequent laws touching this matter*. The rules of some district banks of agricultural credit include a similar provision. Thus these societies can at once ensure the execution of the law of 9 April 1918. Those societies and those district banks of which the rules do not include a similar provision must add to them such an one and submit it to the approval of the competent minister.

In the same way the societies granting credit on real estate which shall deem it necessary for the execution of the new law to extend their districts must immediately advise the Minister of Labour that they have amended their rules to allow of this.

On the other hand, the societies must be of sufficient duration to allow them to make the long-term loans contemplated. Obviously they cannot make loans for twenty-five years if at the time the transaction takes place their remaining minimum duration is one of only twenty-six years. There must therefore be, if necessary, provisions for this also in the rules.

Finally, in conformity with Article 2 of the executive regulation, it is incumbent on the lending banks and societies to make private rules determining the conditions ensuring the making and the repayment of their loans, and stating what complementary security may be exacted from borrowers. These private rules must be submitted to the approval of the competent minister.

§ 2. Terms on which the State makes advances to the district banks of agricultural credit and societies granting credit on real estate.

In Article 4, the law of 4 April 1918 states what are the resources by means of which the societies granting credit on real estate and the agricultural credit societies can make advances to military pensioners and civilians who have suffered by the war. The first paragraph authorizes these societies to receive special advances, not bearing interest, exclusively for the purpose of loans granted in the conditions described in the first article.

The executive regulation specifies (Article 11) that district banks of agricultural credit will receive the advances made to allow the law of 9 April 1918 to be applied, local banks being excluded.

The law leaves to the Committee of Distribution the duty of fixing the amount of the advances to be made to the banks or societies concerned.

The advances granted to the district banks of mutual agricultural credit and the societies affording credit on real estate must allow loans to be made for a maximum term of twenty-five years, and therefore they are

themselves repayable to the State in instalments spread over a maximum period of twenty-six years If the banks and societies grant to borrowers loans paid in graduated instalments, and thus receive no repayments in the first years, they may likewise be allowed, on presenting necessary proofs, to diminish or defer their instalments of repayment for the first three years, the repayment being in no case spread over a period of more than twenty-six years (Article 14 of the regulation).

The revision of the business of the district banks is done by the Department of General Inspection of Credit and Subsidized Agricultural Associations, which can insist on the production of all papers necessary as evidence. For societies granting credit on real estate, Article 15 of the decree lays down that the inspectors' auditing will, in the case of the accounts of the business for which the law of 9 April 1918 provides, not go beyond what is necessary for the supervision of this business, as to which there must be special accounts within the general books of each society.

§ 3. Special provisions.

As we have seen it is the district banks, exclusively of the local banks of agricultural credit, which receive the State advances, and it is on them that the duty of making the annual repayment to the State is incumbent. They must therefore have all necessary guarantees to cover all risks of non-payment.

On principle, they inform themselves as to requests for loans through the medium of the local banks. They entrust enquiries to be made on the spot to these latter, through which, moreover, requests for loans are usually transmitted to them. It is well for the district banks to send the local banks especial instructions which enable them to give information to persons interested. In fact, the district banks are well advised to accomplish no operation without first having taken the opinion of the local banks But they are in no way obliged to call upon the latter to intervene when they are making loans; and it is important that the formalities and costs of borrowing should be reduced if the district banks are to be on the same footing as the societies granting credit on real estate, which lend directly without the intervention of the local banks.

As regards these societies, a provision of the law of 9 April 1918 concerns them particularly. Article 3, §1, of this law dispenses from all contributions not only military pensioners and other sufferers by the war who borrow in order to acquire a small rural holding, but also those of them who acquire a dwelling-house cheaply or a small holding under the laws touching this matter (Laws of 12 April 1906, 10 April 1908 and 11 February 1914).

It will be interesting to examine the results obtained by applying this so liberal scheme and to notice their bearing on agricultural reconstruction in France.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

AUSTRALIA

CREDIT FOR SETTLERS IN NEW SOUTH WALES, — The Official Year Book of New South Wales, 1917. Sydney, 1918.

State Advances to Settlers. —To meet the demand for capital and to help settlers who suffered by drought, the government in 1899 inaugurated a system by which advances are made to settlers at rates of interest and repayment intended to place them within the reach of every settler offering adequate security. The Act of 1899 has several times been amended. In 1906 the powers of the Advances to Settlers Board were transferred to the Commissioners of the Government Savings Bank of New South Wales, and the maximum and minimum advances were fixed at £3,000 and £50 respectively.

On 30 June 1917 the advances made to settlers numbered 14,927, and amounted to £4,281,698, the average amount of each loan being £287. Of them 8,765 representing £1,759,204 had been repaid; and 6,162 remained current, the average amount of the loans thus forming the balance being £409.

The following figures show the business of the bank with regard to making advances to settlers since 1911 :

Year	Advances made			Repayments		Balance repayable		
	Number	Total amount	Average amount	Number	Total amount	Number	Total amount	Average amount
		£	£		£		£	£
1911	838	331,693	395	743	185,420	3,751	1,074,359	286
1912	940	475,070	505	572	153,093	4,122	1,396,336	339
1913	1,386	776,272	551	414	116,476	5,094	2,051,132	403
1914*	602	336,035	558	260	89,186	5,436	2,297,981	423
1915**	860	387,715	451	436	171,617	5,860	2,514,078	429
1916**	686	200,865	293	501	201,611	6,045	2,513,332	446
1917**	501	161,855	323	384	152,513	6,162	2,522,674	409

* Half year ended 30 June. — ** Year ended 30 June

The commissioners are empowered to make advances on mortgages of land held in fee simple or on the conditional purchase, lease, settlement purchase, settlement lease, homestead grant or homestead selection systems. The advances are for the repayment of existing encumbrances, the purchase of land, improvements, the utilization of resources or the building of dwellings.

The conditions on which loans are repayable vary with the circumstances of individual cases: the maximum amount of a loan to one person is £2,000; the rate of interest ranges from 4 ½ to 5 per cent.; the maximum period allowed for repayment is thirty-one years.

Material assistance is thus given to prospective settlers and to those already engaged in agriculture.

Bounties on Agricultural Products. — The federal government has provided for the payment of bounties in order to encourage the production of certain articles of native growth. These articles, and the sums payable on them under the Bounties Act 1907-12, are shown in the following table:

Products	Period from 1 July 1907 during which bounties may be paid	Rates of bounties	Maximum amount payable in any one year
	Years		
Cotton, ginned. . . .	8	10 per cent. on market value	6,000
Fibres —			
New Zealand flax . . .	10	10 " " "	3,000
Flax and hemp	10	10 " " "	8,000
Jute	10	20 " " "	9,000
Sisal hemp	10	10 " " "	3,000
Oil materials supplied to an oil factory —			
Cotton seed.	8	10 " " "	1,000
Linseed (flax seed) . .	10	10 " " "	5,000
Rice, uncleaned.	10	20s. per ton.	1,000
Rubber.	15	10 per cent. on market value	2,000
Coffee, raw, as prescribed	8	1*d.* per lb.	1,500
Tobacco leaf for cigars, high grade	10	2*d.* per lb.	4,000
Fruits —			
Dried dates.	15	1*d.* per lb.	1,000
Dried, candied, exported fruit except currants and raisins	10	10 per cent. on market value	6,000

The Apple Bounty Act, 1918, provided for the payment of a bounty up to a maximum amount of £12,000 on the export of evaporated apples

grown in Australia and sold to the Imperial Government for delivery between 1 April and 31 August 1918. This bounty was payable to growers at the rate of 10 per cent. of the value exported which was taken to be *7d.* a pound.

In 1916-17 the bounty paid in New South Wales on tobacco leaf amounted only to £16.

SPAIN.

THE WORK OF THE "PÓSITOS" IN 1917 — *Delegación Regia de Pósitos — Memoria que eleva al Gobierno de S. M. el Delegado Regio.* —Madrid, 1917.

We take the data reproduced below and referring to the year 1917 from the memorial annually published by the Royal Delegation of the *Pósitos* It synthesizes all the business done by these ancient institutions of rural credit. of which we have more than once spoken at length in this review.

Total receipts amounted to 545,715.18 pesetas and payments to 575,892.19 pesetas, and there was thus a credit balance of 30,177.01 pesetas.

Total loan operations amounted to 23,559,654.23 pesetas, of which 18,530,904.07 pesetas represented 104,257 new operations, and 5,028,750.10 pesetas referred to 16,947 deferred operations or renewed loans,

We should note that these last were in 1916 less by 939,446 97 pesetas than in 1915, but that in 1917 they increased by 1,360,944 pesetas.

Repayments received in 1917 amounted to 19,086,034.83 pesetas, of which 17,873 261.96 pesetas represented 107,306 voluntary repayments, and 1,212,672.87 pesetas 7,111 repayments following on legal proceedings.

At the close of the year we are examining the capital of the *pósitos* amounted to 91,141,427.46 pesetas, of which 72,225,080.41 pesetas were lent to 233,614 persons; 13,282 763.17 pesetas were in hand; and 5,633 583.88 pesetas were in the form of properties and inventoried values.

As regards old debts, which originated before the foundation of the Royal Delegation of the *Pósitos* in December 1917, they were represented by 46,677,187.50 pesetas held by 196,014 debtors.

In the following table we reproduce comparative data as to the loans granted and renewed by the *Pósitos* in the three years from 1915 to 1917, and also as to repayments in these years.

Loans.

Year	Granted	Renewed	Total
	pesetas	pesetas	pesetas
1915	17,906,822	4,607,253	22,514.075
1916	21,419,605	3,667,806	25,087,411
1917	18,530,904	5,028,750	23,559,654

Repayments.

Year	Voluntary	Forced	Total
	pesetas	pesetas	pesetas
1915	17,314,781	1,200,573	18,515.354
1916	19,133,269	1,409,173	20,624,442
1917	17 873,361	1.212.672	19,086,033

On the whole the business of the Pósitos has, as appears from these figures, continued to make notable progress in 1917.

When the amount of new loans and repayments in 1917 is compared with those of the previous year, we find that the former diminished by about 2,900,000 pesetas, the latter by 1,600,000 pesetas. The difference between these decreases reacted favourably on the amount of cash in hand at the end of the two years, which amount rose from 12,189,101.33 pesetas in 1916 to 13,282,763,17 pesetas in 1917.

ST. HELENA (BRITISH COLONY).

LOANS FOR THE CULTIVATION OF NEW ZEALAND FLAX — *Report for 1917 on the Colony of St Helena* London, 1918

In the island of St. Helena, no industry yet attempted has succeeded so well as the production of fibre and tow from New Zealand Flax (*Phormium tenax*). The rainfall being good and the soil friable, New Zealand flax thrives with little or no attention and no insect pest or disease has yet appeared. Prices were high in 1917, the average price obtained for fibre being £81 18*s*. 6*d*. and for tow £47 3*s*. 9*d*. per ton as compared with £49 16*s*. and £28 5*s* respectively in 1916.

Besides the Government Mill, which purchased 1,708 tons of leaves from 68 small growers, and produced 180 tons of fibre and 42 tons of tow, there are three private mills in the island which milled a total of about 4,355 tons of leaves, producing 434 tons of fibre and 180 tons of tow.

The experiment of granting small plots of Crown land to inhabitants for the purpose of growing New Zealand flax, tried with success on a small scale in 1915 and 1916, was largely extended during 1917.

Under this scheme loans have been made to holders of plots, in the form of flax suckers, to the value of £5 in each case, repayment of which, together with a small rate of interest, is secured on the first crop and deducted from the proceeds of its sale to the Government Mill. The facilities thus offered have been readily taken up by would-be small growers, 38 plots totalling about 33 acres having been granted by the end of 1917, on which approximately 100,000 suckers have been planted.

A loan of £300 from the Government Flax Mill funds was utilised in clearing, fencing and planting two Government fields, about 7 ¼ acres in extent, with 30,000 flax suckers.

The estimated extent of land under flax cultivation increased during 1917 from 750 acres to about 900 acres.

Part IV: Agricultural Economy in General

OTTOMAN EMPIRE.

JEWISH AGRICULTURAL COLONIZATION IN PALESTINE

SOURCES :

ASIATISCHES JAHRBUCH (*Asiatic Yearbook*). Berlin, 1914.

NAWRATSKI (Dr. Kurt) : Die jüdische Kolonisation in Palastina (*Jewish Colonization in Palestine*). Munich, 1914.

STATISTICS OF PALESTINE (Judaea), Zionist Office, Jaffa 1916-17 (in Hebrew).

VILKANSKI (I.) : Baderek (*On the Way*). Jaffa, 1916-17 (in Hebrew).

OETTINGER (Jacob, Agricultural Engineer) : Jewish Colonization in Palestine, published by the Head Office of the Jewish National Fund, London. Undated.

ALMAGIÀ (Prof. Roberto) : La questione della Palestina (*The Question of Palestine*). Istituto Coloniale Italiano, Rome, 1918.

LÉVI (Prof. Sylvain) : Une renaissance juive en Judée (*A Jewish Renaissance in Judaea*). Ligue des amis du Sionisme. Paris, 1918.

TOLKOWSKY (S., Agricultural Engineer) : La colonizzazione ebraica in Palestine (*Jewish Colonization in Palestine*). London Office of the Zionist Organization. Florence, 1918.

ZURISSADAY (M. F.) : La Palestine et la Renaissance du peuple juif (*Palestine and the Renaissance of the Jewish People*). Lausanne, 1918.

The colonization of Palestine by Jews has a quite special character, for it is not, like every other colonization, the expanding movement of a people. It does not tend to enlarge the boundaries of a country. It is the concentration of a nation on certain historic soil, an emigration which is a return to a lost motherland and the repopulation of that land.

§ 1. NATURAL AND ECONOMIC CONDITIONS OF THE COUNTRY.

It would be impossible to determine the confines of Palestine exactly. To the west it touches the Mediterranean Sea, to the south it is lost in the desert of Sinai, to the east in the desert of Syria, and to the north it meets the mountains of Lebanon and Hermon. In Biblical times the area of this land was perhaps double what it is today. It now measures 28,000 square kilometres, much the same as Belgium. The Jordan, which rises in the Mountains of Hermon at an altitude of 2,760 metres, has a course parallel with the Mediterranean shore at a distance thence of about 70 kilometres.

It then crosses the Lake of Tiberias and flows into the Dead Sea. This river divides the country into two parts, a western and coast district which constitutes a zone of fertility, easily cultivated because of its life-giving waters, and, to the east, a rocky territory on which small woods are scattered here and there. The fertile plain of Hauron, lying at the foot of the mountain so called, stretches beside the river to the east.

The climate varies very much with the altitude. On the coast there is always a high and more or less constant temperature, from 20° to 26° centigrade. The most eastern territory, which is near the mountainous district, has a lower temperature, and there is often snow in January and February. The plain of the Jordan has a hot climate because it lies low: its temperature is 24°. The plateau beyond the Jordan, which forms a vast steppe, has a temperature slightly higher than that of the coast. The rainfall is equal to that of Central Europe, namely from 500 to 700 millimetres, but is unequally spread over the seasons. Rain falls between November and March almost exclusively. It is of much benefit to the plains and the plateaux; but the same cannot be said of the mountain zone, for the cisterns in which water was conserved in antiquity have disappeared, and the waters have destroyed the terraced slopes which anciently covered these mountains. The vegetation is like that of Italy and Greece, especially on the coast and on the western plateau of the Jordan. Thanks to irrigation, grapes, olives, oranges, almonds, figs, etc. are obtained. The land lends itself to the cultivation of corn, barley, sesamum, etc. On the mountains of Lebanon cedars are often found, but the forests once so plentiful in the country exist no longer.

Among domestic animals the most important to Arab rural economy is the sheep, of which the milk and wool constitute a notable source of profit. Goatfarming is practised to a considerable extent, goat's flesh being the chief food of the peasants. Oxen are most often used as beasts of burden. In the mountain zone transport also takes place by means of camels and donkeys. Horse-breeding is not much practised.

The population is about 700,000. The density of population is therefore between 22 and 23 persons a square kilometre. The present population of Palestine is only 10 or 15 per cent. of that found in the time of the country's prosperity, and it could still maintain its former population if it recovered scientifically economic conditions. About three quarters of the inhabitants, or approximately half a million, are Arabs; and the remaining quarter is made up of 120,000 Jews and 100,000 Christians The percentage of the total population formed by Jews is larger than it is in any other country in the world.

In Palestine the Jews speak the dialects of the countries of their origin. Thus some 15,000 speak a Spanish dialect because they are descended from the Jews who fled from Spain at the end of the fifteenth century. The remainder of the population which has immigrated in the last thirty years speaks Hebrew, Yiddish, Arabic, Russian, Persian, Polish, Roumanian, Georgian, English, French, German, etc. In order that this linguistic chaos, which tends rather to separate than to unite, may be eliminated,

classical Hebrew has been introduced as the spoken tongue and as the language in which instruction is given in the schools.

Means of communication still leave much to be desired. The roads intended for traffic are the caravan-roads which are as they were a thousand years ago. The magnificent roads made by the Romans have been largely destroyed. Railways have been constructed only during the last twenty-five years. The concession of the first, the Jaffa-Jerusalem line, over a course 87 kilometres long, ocurred in 1892. The line was made by a French company. This line is very important to the colonies of Judaea, that is to say to the southern part of the country. In 1911 as many as 170,000 persons travelled on it, about a fifth of them being pilgrims. On 1 September 1900 the construction of the line from Hedjaz to the holy places between Damascus and Medina was begun at the wish of Abdul Hamid. This is a narrow-gauge line, 1,465 kilometres long, made especially for the Mahometan pilgrims. It crosses the eastern part of Palestine and opens up all the country east of the Jordan to traffic. The most important point about it is that it joins the Bagdad railway and is thus connected with the European railway system. From the station of Derat on the Hedjaz railway a branch line, 161 kilometres long, has since 1906 gone towards Jaffa across Galilee, that is to say across the north of Palestine. In 1912 a line was made between the Mediterranean coast towns of Caiffa and Akka. The Appul-Naplous-Jerusalem line, which is to connect the Jaffa-Jerusalem and Hedjaz lines, is in course of construction, and will allow the great masses of pilgrims to be sent to Jerusalem by way of Caiffa as well as by the Jaffa-Jerusalem line. During the war several lines have been constructed, in particular one which is to connect Sinai with the Suez Canal so that there will be a railway between Egypt and Palestine. This railway will be very important to the general development of the country. It will open up the economic resources of Palestine to foreign capital and labour to a greater degree than heretofore.

The most important ports of the country are Jaffa and Caiffa. Maritime traffic between these ports is continually on the increase. Jaffa is the natural exporting port of the economic district traversed by the Jaffa-Jerusalem railway, and Caiffa occupies the same position with regard to the Hedjaz railway. Almost all the export trade of Palestine goes through these two ports, or through that of Beyrouth which serves, in particular, the districts of Lebanon and Hauran lying behind Damascus. There is also the port of Gaza, near the Egyptian frontier, centre of a maritime traffic which becomes fairly active at the time of the barley harvest. Nothing has been done to develop traffic in the country. Jaffa has, for instance, no pier or other works such as would make it a real port, but ships have to anchor at a certain distance and land cargo and passengers by means of boats, a proceeding which is very difficulty in January and March.

The chief articles of export are oranges, soap and wine. The country most important to Palestine is its nearest neighbour, Egypt.

§ 2. Agrarian conditions.

To understand the colonization of Palestine it is necessary to know not only the natural and economic conditions of the country but also certain peculiarities of its agrarian system. The laws in force in the Turkish Empire distinguish between the three following kinds of landed property:

(1) *The lands of the State* (Mirien) which comprise the greater part of the territory taken by the Turks from the infidels, a territory legally considered to be the property of the State, which can be granted on lease for an annual rent only to its present tenants who have not the right to alienate the lands they cultivate.

(2) *Private property* (Mulk) constitutes a very small part of Turkish territory. Most of it is land belonging to towns and held by its legitimate possessors in absolute ownership. In Palestine the land so held consists of the orange-groves near Jaffa and of the great plain of Jesreel which belongs to an Arab banker of Caiffa.

(3) *Property held in mortmain* (Vakouf) is considered as the property of the religious foundations, for it was at one time taken, like the lands of the State, from the infidels. The lands of these foundations are inalienable and cannot be conveyed without the authority of the Minister of Religious Observances at Constantinople. Landed property of this kind has little importance in Palestine, existing only at a few points in the neighbourhood of the holy places and in the cemeteries.

(4) *Public property* (Metrouken) is owned collectively and is inalienable. Pasturelands, markets, etc. are in this category; as are also the lands held collectively by a village community (Mouschia), cultivated by the peasants in common, and redistributed among the late holders every two years, a system like that of the Russian *mir*. Every farmer enjoys only the usufruct of his land within the limits assigned to him and therefore cannot alienate it. Lands of this kind cannot be colonized.

(5) *Unowned lands* (Merat): the right to farm these belongs to the person who first cultivates them if he be authorized by the competent administration. The lands afterwards pass to the property of the State.

This system of land tenure has the effect of preventing the existence in Palestine of much land which can be cultivated by private persons. A colonizing company here assumes a very difficult task, especially in view of the fact that Turkish law does not recognize the institution of the legal person, and therefore excludes corporations from the right to buy land. It was only in 1913 that the purchase of land by bodies corporate was allowed, at a time when other agrarian reforms were attempted. Thus the use of the institution of the mortgage was adopted, and land-survey was organized with a view to making conditions of land tenure clear and rendering possible loans secured by mortgages on land.

The peasants own about 15 per cent. of the land in the district beyond Jordan, about 60 per cent. in Galilee and about 50 per cent. in Judaea.

Agriculture, which is the peasants' chief source of income and chief

occupation, still follows primitive methods. Almost throughout the country the system of a two-crop rotation in summer and winter sowing prevails. The first crop consists of wheat, barley, oats, beans, lentils, etc., and the second of buckewheat, sesamum, melons, gourds, etc.

Foodstuffs are grown especially in Galilee, to the east of the Jordan, and particularly in the Hauran districts. Oranges and other southern plants are cultivated in the populated plains around Jaffa, as in the plain of Jesreel; on the greater part of the coast and in the countries watered by the Jordan, including the Lake Tiberias district. Olive-trees succeed everywhere, but especially in the south-west of the country, on the coast and around Jaffa. Vinegrowing, which flourished in the Biblical period, lost much ground after the Mahometan invasion, and is again beginning to develop only now, with Jewish colonization. The vinegrowing is as vast as the olive-growing district, stretching over the neighbourhood of Jerusalem and Jaffa, the plain of Hebron, Galilee and the country east of Jordan.

This is a general picture of the country which has for some fifty years offered a field for a colonization employing various means and attaining to various results and practised by Jews, as individuals or associated in collective groups.

§ 3. The history of Jewish colonisation in Palestine.

The beginnings of Jewish colonization in Palestine date from the sixteenth century. We know that a dignitary of the court of Sultan Solim, Don Josef Nasi, obtained full powers towards the middle of the seventeenth century to rebuild the town of Tiberias on the lake so called, and to form a colonizing district and place of refuge for Jews who left the countries of Europe. An appeal was therefore issued to Jews, inviting them to establish themselves here and devote themselves to agriculture and the pursuit of their trades. A mulberry growing and silkworm-rearing district was thus formed in the neighbourhood of Lake Tiberias. Spanish linen was imported thither in order that clothes of the kind produced in this period by the Venetian industry might be made. After the death of this Jewish prince all his property was confiscated by the Sultan, and all trace of this first attempt at colonization was lost. According to the account of Moses Don Joseph von Tram, the Jews occupied themselves in the seventeenth century in producing wool, wheat and vegetables and in silkworm rearing and beekeeping. The Jewish population of Palestine did not exceed 3,000 at the end of the eighteenth century, and the Jewish colonization of Palestine did not begin on a really large scale until towards the middle of last century. Palestine had lost the importance it derived from the fact that, until the sea route by the Cape of Good Hope was opened, it served as a bridge between the East and Asia Minor. The opening of the Suez Canal restored to it its place on a trade route, and it thereupon became a colonizing district of evident economic importance.

The first essay at colonization made by individuals took place in

1854, and was undertaken by a well known philanthropist, Sir Moses Montefiore. He visited Palestine several times, and entered into negotiations with the sultan and the British ambassador as to the agricultural condition of the Jews in Palestine. He succeeded in establishing a few dozen families of Safed (Galilee) and made them practise agriculture. In 1860 he founded a great Jewish organization, the Universal Alliance of Israel, which aimed at improving the social condition of Jews, especially in the countries of Eastern Europe, and at protecting them. The Alliance was not a colonizing company in the strict sense of the word, but an institution of relief which founded in several countries schools giving general and technical instruction.

The first agricultural school which the Alliance opened in Palestine was that called *Mikveh Israel* or the Hope of Israel, and was founded near Jaffa, to the south of the Jaffa-Jerusalem railway, in 1870. It still exists and yields excellent results. The Turkish government has given 250 hectares of land to form a field for this school's experiments; it teaches mainly viticulture, floriculture and connected subjects. Pupils of this school have come to hold itinerant lectureships in the various Jewish colonies. The Alliance owns in Paris a preparatory establishment (École Normale) in which teachers are trained for the agricultural schools.

The first Jewish agricultural colony was founded in Palestine in 1878 by the inhabitants of Jerusalem. It is called *Petàch Tikva* or Threshold of Hope, and is situated 15 kilometres to the north of Jaffa. The district cultivated by the colonists measured 280 hectares, but has been expanded by the purchase of neighbouring lands to 1278 hectares. This first attempt was all the more noteworthy because conditions of public security in this country then left much more to be desired than they do now.

About 1880 a strong current of emigration towards Palestine came from Russia and Rumania. In order to spread the idea of colonization among the Jewish masses and win them over to it, propaganda clubs were founded among the Jewish youths of many Russian towns. They were called *bilu*, a word made up of the initials of the words of the Hebrew verse, "Bet Jacob Lechu Venelchu", that is, "Forward, House of Jacob!" About the same time a great colonizing company, called *Hoveve Sion* or the Friends of Zion, was founded at Odessa; and it did practical work, establishing a series of agricultural colonies in Palestine between 1882 and 1884. Thus in Judaea, in the district south of the Jaffa-Jerusalem line, there were founded the colonies of *Rischon le Sion* or the First Step to Zion, *Olludi Hakin* and *Ekron*; and in Samaria the colony of *Zichron Jakob* or Jacob's Memorial, some 25 kilometres south of Caiffa; in Galilee that of *Rosc Pina* or the Cornerstone; and to the north of Lake Tiberias those of *Yesod Hamalah* and *Misemar Haiardon*.

These foundations of this company caused a larger development of colonization although the colonies were not in a flourishing condition. The insufficient public security and the lack of good roads, the fact that the country was entirely left to itself, the marshland fevers prevalent in many districts, the very vague native conception of private property and, finally,

the entirely new and the difficult surroundings of immigrants, ignorant of the local language and customs — such were the obstacles which the first comers to Jewish Palestine had to overcome by their tenacity and self sacrifice. Moreover, agriculture as practised by the Arabs did not constitute a sure source of income for the Jewish immigrants, for they had not the guidance of agricultural experts who had made a study of the special conditions of Palestine. The immigrants lacked, above all, the means to buy necessary implements and to maintain themselves during the first period of organization.

In order to improve the conditions of the colonists in this first period of colonization, Baron Edmund de Rothschild decided to take several colonies which were in a melancholy situation under his protection. He had them managed by a staff appointed *ad hoc*. They were the colonies of *Riscion le Sion*, *Zichron Jacob*, *Rosc Pina*, *Petach Tikva*. Viticulture was introduced into them with a view to producing the best kinds of French wine. In the colony of *Riscion le Sion*, which had Baron de Rothschild's particular support, large cellars supplied with the most modern plant were constructed. The storage capacity was of 75,795 hectolitres, and the whole product of the vintage of all the neighbouring colonies could thus be received. Baron de Rothschild founded new colonies — *Ecron*, *Sidcia* and *Bat* in Judaea from 1884 to 1888, and the small colony of *Metula*, the northernmost in Palestine, in 1896. From 1889 to 1899 he also bought vast areas of land in Galilee and Samaria, and about 11,700 hectares in the district beyond the Jordan, near the El Mazurib station on the Hedjaz railway. This last property was granted to Arab peasants on lease, for the unhealthy and insecure conditions of the country and continual Bedouin invasions made Jewish colonization too difficult. However in 1890 and 1891 the Warsaw colonization company called the Friends of Zion founded the colonies of *Rechoboth* in Judaea and *Hedera* in Samaria. In 1895 the Odessa colonization company founded the *Castignia* colony in the south of Palestine, and a Bulgarian colonization company founded the colony of *Artuf* to the north of the Jaffa-Jerusalem railway in 1896. All these colonies were well able to develop, thanks to the financial support of Baron de Rothschild. But their prosperity was short-lived. Baron de Rothschild, whose knowledge of the conditions of the country was imperfect, aimed at forming in Palestine a class of colonists like the French vinegrowers, who are often able to supply all their needs from a comparatively small piece of land by practising intensive viticulture. Disappointment was inevitable; for the success of the French peasants is the result of a long process of adaptation to local conditions, whereas in Palestine no thought was given to the necessity of co-ordinating the immigrants' work with the nature of the soil. The aim Baron de Rothschild set before himself was very clear, for the miseries of the Jews in eastern countries were so great that they could not be left without aid, but the means employed to reach this aim were insufficient. Almost all the colonists gave themselves up to vinegrowing, for a prospect of economic independence and prosperity attracted them, and they neglected every other kind of cultivation almost entirely. The production of wine increased more and more, and then sud-

denly a crisis occurred on the European wine market. The price of wine fell below the cost of production, and the colonists whose training fitted them only to grow vines were no longer able to be economically active and incurred heavy losses. Moreover the wines of Palestine, in spite of their excellent qualities, have a reputation inferior to that of the French wines which were already known and had assured their entry on the markets of the whole world. To remedy this crisis Baron de Rothschild decided to buy all the wine produced by the Jewish colonies at prices higher than the European market prices, for he hoped that normal conditions would soon be re-established. This beneficent work cost this philanthropist enormous sums during a period of fifteen years ; and it was necessary to have recourse to other methods in order to reorganize the colonization and save it from these crises.

In 1899 Baron de Rothschild turned to a great Jewish colonizing company, the Jewish Colonization Association which has its offices at Paris and was formed in 1893 by Baron Hirsch. It is known by the initials of its name, *Ica*. It began by doing its work of colonization outside Palestine. The object of the *Ica* is, according to its rules, the promotion of Jewish emigration from countries in which social and political conditions make the position of Jews difficult, towards the United States and Argentina (1). Baron de Rothschild ceded his colonies to this society in order that it might reorganize them.

In order to encourage the establishment of Jews in the agricultural colonies this society had to form schools, banks, co-operative societies. It had to support all institutions sharing its aim. The financial resources of the *Ica* amount to some 200,000,000 francs.

The management of the *Ica* undertook to reform these colonies radically. The year 1900 should be looked upon as beginning a new era in the history of Jewish colonization in Palestine. The association began by giving more liberty and autonomy to the colonists in order to accustom them to the idea that it was not a relief society. In four years the vineyards were reduced to one third of their former area, barley, olives, almonds, oranges and other crops being grown in the land thus set free. The great cellars were granted to the vinegrowers in ownership and a commercial syndicate, "the Co-operative Society of the Viticulturists of the Great Wine-Vaults of the Colonies of Riscion le Zion and Zichron Jacob", for the sale of Palestine wine, was formed with a working capital of 1,650,000 francs. The new management chose workers with a view to making use of the most suitable persons, those having the skill and knowledge necessary to the practice of agriculture. The new colonists had to undergo a period of trial as farmers, after which they obtained the right to establish themselves finally on the land, as owners, paying the value of the lands granted to them in instalments. The new management sought little by little to give this colonization an economic instead of a philanthropic character. The colonists ordinarily received a lot of some 27 hectares, that is 300 dunam according to the measure of the country, and also a cottage and accommodation for

(1) See our issue for August 1916, and August 1918.

their stock, the value of the whole being from 12,000 to 18,000 francs. The capital had to be repaid in 51 years by small instalments, interest on the sum lent being at the rate of 2 per cent. The *Ica* thus founded a series of colonies in Palestine, almost all of them in the neighborhood of Lake Tiberias in Galilee. They are the following: *Sedjerc* founded in 1910 with a model experimental field; *Mescia*, *Melhamia* and *Jamma* founded in 1902; *Betscan* in 1905; *Athit* in Samaria to the south of Caiffa, on land which at first belonged to Baron de Rothschild, in 1907; and, finally, *Kinereth* and *Mizpa* in 1908. All these colonies developed rapidly and successfully under the new management, and before the war they were all noticeably prosperous.

§ 4. Zionism as a colonizing factor.

Side by side with the colonization which had a strictly economic and philanthropic character, and which we have tried to examine, a new current of ideas, having a national and political character, developed towards the end of last century and was known as Zionism. The ideal of this movement is the foundation in Palestine of a national home for Jews guaranteed by public law, in accordance with the programme adopted by the first Zionist congress at Basle in 1897 (1). This movement has an eminently political character which is outside the limits of this paper. In the economic sphere Zionism aims at buying land in Palestine in order to found there colonies which can be the inalienable possession of the Jewish people. The colonist receives only the usufruct. The legal title by which such land is held is that of emphyteusis or hereditary lease. Land thus acquired is exempted for ever from private speculation, and land revenue belongs to the State. By this ideal Zionism is connected with the ancient Hebrew agrarian system while at the same time it keeps pace with the movement of modern agrarian reform.

The means at the disposal of Zionism for the fulfilment of its task are the following.

In 1899, that is to say in the year in which Baron de Rothschild's colonies passed to the *Ica's* management, the Zionist colonial organization founded a Jewish colonial bank, the Jewish Colonial Trust, a limited liability company which has its offices in London. It is the function of this bank to fcilitate the purchase of lands in Palestine and to grant to colonists short-term loans and long-term mortgage credit, hitherto entirely lacking in Palestine. In 1900 this bank opened two branches, one at Jaffa, the Anglo-Palestine Company, which had local offices at Jerusalem, Beyrouth, Caiffa, Safed, Hebron, Tiberias and Gaza, and the other, known as the Anglo-Levantine Banking Company, at Constantinople.

Another Zionist institution, the Jewish National Fund, founded in 1901, also became an important colonizing factor. It was organized as a limited liability company having offices in London. Its income consists exclusively of gifts and subscriptions, especially from the least well-to-

(1) See our issue for October 1916.

do classes. The capital thus obtained amounted to 7,500,000 francs at the end of 1917. This institution enjoys a great popularity among Jews adhering to Zionism. It is very active both in the social and economic and in the industrial spheres. In 1908 it founded a model agricultural school in the colony of *Kinereth*, and an olive-grove in the colony of *Hulda* in Judaea near the Jaffa-Jerusalem railway. In the same year the colony of *Daganya* on Lake Tiberias was founded. In 1910 the colony of *Ben Scemon* near Hulda was founded to intensify the cultivation of olives.

In 1908 another important institution was founded with the help of the National Fund, the Palestine Land Development Company. The object of this company is to manage the lands of the National Fund, especially those lying on Lake Tiberias, the value of which can be realized only by means of large capital and therefore not by the Jewish farmers. The Land Development Company also grants to individuals lots of cultivable land which it continues to manage if the owners live outside Palestine. In 1912 it amalgamated with the *Ica* in order to pursue with that body the work of colonization in Palestine. In this way the purchase was effected of the *Dscema* estate at the extreme south of Palestine, near Gaza, of *Cafruria* in Judaea, and of *Karkur* which lies near the coast, halfway between Jaffa and Caiffa. This institution also bought other lands which it is now preparing for colonization.

In 1911 the National Fund was responsible for founding an institution which aims at forming co-operative agricultural colonies. It is called the Erez Israel Settlement Association, and it has formed two co-operative colonies of this kind, namely the *Marchavia* and the *Dagavia*, on the principles of Professor Oppenheimer to which we have already referred.

§ 5. The work of the colonizing companies

The lands in Palestine bought by the colonizing companies measured, before the war, 44,300 hectares, that is 2 per cent. of the country's total area and 9 per cent. of its cultivable area. This land in Jewish ownership is geographically distributed as follows:

Judaea	11,000	hectares	or	129,864	dunam
Samaria	8,000	»	»	88,243	»
Jezel Plain	1,200	»	»	9,415	»
Lower Galilee	10,000	»	»	116,415	»
Upper Galilee . . .	8,000	»	»	84,707	»
District beyond the Jordan	6,800	»	»	70,000	»
Total . . .	44,000	hectares	or	479,824	dunam

Hitherto half this area has been colonized, and some fifty large and small colonies have been formed. The names of the Jewish colonies, the years of their foundation, their approximate population, their area and the purpose for which they are intended are shown in the following table.

Name, year of foundation, approximate population, area and purpose of each colony.

Colony	Year of foundation	Approximate population	Area dunam	Purpose
JUDAEA.				
Mikweh Israel	1870	150	2,612	Agricultural land.
Petach Tikwah	1878			Plantations.
Machne Jehuda	1913			Colony of agricultural labourers for Yemenians.
Jehudieh	1881	2,500	23,837	
Am Ganim	1906		762	Colony of agricultural labourers.
Rischon le Zion	1882	850	11,402	Plantations.
Nachalath Jehuda	1913			Colonies of agricultural labourers.
Wadi Hanin	1882	200	2,703	Plantations.
Ekron	1884	350	12,723	Field cultivation and plantations.
Katra	1884	200	5,632	Plantations and field cultivation
Rechoboth	1890	800	14,193	Plantations.
Esra				Colony of agricultural labourers.
Moza	1890	40	1,100	Field cultivation.
Kastinie	1896	150	5,622	
Artuf	1896	70	4,670	
Ben Schamen	1906	120	2,320	Property of Nat. Fund and «Bezalel» colonies.
Bir Jakob	1907	25	2,048	Colonies of agricultural labourers and plant.
Hulda	1909	50	1,890	Property of National Fund.
Dschemama	1911	25	6,000	In course of formation.
Abu Schusche	1912		7,000	
Kafrunch	1912	20	5,000	
Bir Adas	1912	40	4 220	
Dilb	1913		1,600	
SAMARIA				
Sichron Jakob	1812			Plantations and field cultivation.
Schefeja	1888			Dependent colony: plant. and field cultiv.
Bath Schlomo	1888			
Marah	1907	1,150	30,608	Dependent colony: field cultivation.
Herbet Menschié	4911			
Tantura			300	Uncolonized land.

Name, year of foundation, approximate population, area and purpose of each colony (continued).

Colonies	Year of foundation	Approximate population	Area in dunam	Purpose
Chederah	1891	500	31,335	Colony of agricultural labourers for Yemenians.
Machliel	1912			
Chederah Zeita	1912		1,200	In course of formation.
Chefziboth	1905		7,000	Property of the Agadath Netaim Society.
Kafr Saba	1892	—	7,231	Plantations.
Atlit	1897	50	6,800	Agricultural experimental station.
Kerkur and Bedus	1912	—	11,400	In course of formation.
GALILEE.				
Rosch Pinah	1882	650	20,102	Field cultivation and plantations.
Machanajim	—	—	21,885	Abandoned colony.
Jessod Hamaalah	1883	225	12,228	Field cultivation.
Mischmar Hajairden	1884	125	7,596	» »
Ain Seitun	1891	—	6,016	Sparsely populated colony
Metula	1896	325	16,907	Field cultivation.
Bene Jehuda	—	50	—	Sparsely populated colony.
Sedschera (farm)	1890	100	17,717	Farm of the I. C. A. let to co-operative labourers' society.
Sedschera (Colony)	1900	200		Field cultivation.
Mesha	1902	200	16,023	» »
Melhamieh	1902	200	9,477	» »
Jemma	1902	300	24,422	» »
Betdschen	1904	100	4,549	» »
Mizpah	1908	50	3,420	» »
Hattin	—	—	2,000	Uncolonized land.
Lubie	—	—	7,082	» »
Nem Tiberias	—	—	830	» »
Kinnereth (Colony)	1908	25	5,572	Field cultivation.
Kinnereth (farm)	1909	60	3,703	Farm of the N. F. let to a co-operative labourers' society.
Dagania	1910	45	3,072	Farm of the N. F. let to an agricultural co-operative colony.
Medschdel	1910	—	5,000	Farm of the Tiberias Plantations Society.
Merchawja	1911	100	9,415	In course of formation, intended for agricultural co-operative colonies.
Poria	1911	60	3,545	First farm of the Achusa Society.
DSCHOLAN.				
Property in the Dscholan	1886	—	70,000	Property of the I. C. A. let to Arabs.

As appears from the preceding table, the first colony, *Petach Tikva*, was founded in 1870. The recent foundations date from 1913 and are still in their first stage of development. Their management is not yet quite systematic economically. In the Jewish colonies the agricultural population is about 10,000, that is about 10 per cent. of the total Jewish population of Palestine. The purchase of land has gone on with difficulty for, as we have noted, the Turkish system of land tenure places difficulties in the way of making landed property fluid. Difficulties were not confined to purchases, for in many districts the land was marshy and little fitted for cultivation, and moreover marsh fever prevented the formation of inhabited centres. There was no scientific system of draining the marshy districts. The colonizing association had the task of preparing the land for cultivation and making necessary arrangements on a large scale and in accordance with modern methods. One of its most important duties was the reforestation of the country, which had been made barren artificially, and the restoration by this means of its former fertility. To make these lands healthy the cultivation of large numbers of eucalyptus trees in the *Petach Tikva*, *Chedera* and other colonies was decided upon. The hygienic conditions of the country have been notably improved by these works, and many colonies which had been deserted on account of the marsh-fever have come once more to be among the most populous in Palestine. The eucalyptus tree, which has an excellent influence on climate and health, is now cultivated by the Arabs who even call it the Jews' Tree (*sadiar al jahod*).

Other works of reforestation were also undertaken, by the colonizing companies we have mentioned, in this country which centuries of continual war have left so wasted. Following on a resolution of the Sixth Zionist Congress, of 1904, a special fund for the reforestation of Palestine was formed. At the end of 1917 this fund amounted to nearly 1,200,000 francs, and it was intended for the formation of forests in the neighbourhood of the Jewish colonies. In 1908, 100,000 trees were planted on the lands of the National Fund in the district of Judaea, in the colonies of *Hulda* and *Ben-Schemen* to the north of the Jaffa-Jerusalem railway. This plantation was called the Herzl Forests in memory of the distinguished founder of Zionism who died in 1904. The plantation of such fruit and nut-trees as olives, pomegranates, almonds, etc., constitutes one of the chief tasks through which the work of this institution tends to give back to the country its old productivity.

To meet the need of the woodcutters, especially of the Jewish emigrants from Southern Arabia, the Yemenians, small cement cottages, having gardens, are built, each worth altogether about a thousand francs. These little dwellings subsequently become the property of the labourers, being paid for by instalments on very moderate terms. The settlement in the agricultural colonies of a population strongly attached to the soil is thus encouraged. Contracts for these cottages are concluded by the colonists with the National Fund through the medium of the Anglo-Palestine Company Bank. Hitherto these cottages have been built near the large colonies of *Chedera* and *Petach Tikva* out of which have arisen dependent colonies or

independent settlements of agricultural labourers. Up till 1913 the National Fund thus built dwellings for 136 families. The principal aim is to encourage a raising of the economic position of the agricultural labourers, so that they will have the possibility of becoming independent. Those of them who have given proofs of capacity and have shown that they have a sufficient experience of agriculture are established on the property of the *Ica* or receive grants of land enabling them to form co-operative colonies like the *Dagania* and the *Mercavia*. The latter gives occupation to 18 members, who share in the profits of the farm, and to 42 wage-earning labourers. The cultivated area measures 3,500 dunam or about 35 hectares. There is here question of the first experiments in co-operative colonization, on the model of the collective leasing societies, and no definite opinion can be given as to the future of institutions of the kind.

Loans on profitable terms are made to the colonists by the Anglo-Palestine Company Bank, which was, as we have said, the first to introduce the system of making loans on short-term commercial bills and long-term mortgage loans. When it has enlarged and consolidated its operations this bank will have constituted an agency of agricultural credit which will be quite its own. Its development since its foundation is shown in the following table:

Development of the principal operations of the Anglo-Palestine Company in the last decade (in thousands of francs).

Year	Short term loans	Long term loans	Advances secured by bills	Loans to the credit agency	Deposits and current accounts
1903	238	—	5	—	383
1904	1,050	—	69	—	999
1905	1,462	—	353	—	1,217
1906	3,228	—	545	65	2,684
1907	4,410	—	489	225	2,513
1908	3,949	—	485	314	3,002
1909	4,489	275	618	323	4,718
1910	5,180	531	699	370	5,240
1911	5,765	715	785	419	5,994
1912	6,449	853	760	499	6,768

The bank's capital amounted to 2,000,000 francs at the end of 1913; its deposits to 4,500,000 francs; and the rate of interest was fixed at 4 per cent. which showed that the bank enjoyed much popular confidence. The total business done by the bank's branches in 1912 is shown in the following table:

Balance-Sheet of principal operation of the branches of the Anglo-Palestine Company in 1912 (in millions of francs).

Cash	154
Paper	30
Credit on current account	33
Advances on bills	2
Advances on title-deeds	8
Advances to institutions of credit	2
Long term credit	2
Deposits and current accounts	56
Jewish Colonial Trust	23
Correspondents	41
Account of the central office at Jaffa with the branches	33
Total	384

The bank also makes loans to the co-operative credit societie of the country, so that a colonist needing credit, and unable to address himself to the bank because he has no credit account, can obtain a loan from his own co-operative society.

The first rural banks in Palestine were rounded in the *Petach Tikva* colony in 1908. Two years later there were eight of them. Since that date the Odessa Palestine Committee has assigned 50,000 francs to the Anglo-Palestine Company, 35,000 francs being intended for agricultural co-operation in general and 15,000 francs for the co-operative organization of agricultural labourers. The rural banks developed rapidly. In 1912 they numbered 45, and had 1833 members and a credit of 934,068 francs. The loans made by co-operative banks are distributed as follows according to the trades of the borrowers:

Trades of borrowers in 1912	Number	Loans made in 1912 Amount francs
Colonists (agriculturists, viticulturists and planters)	622	555,000
Artisans and labourers	426	165,271
Rural landowners and small traders	592	198,040
Members of consumers' co operative societies	43	10,633.32
Members of societies for improving land & buying forage collectively	14	1,960
Members of institutions of public utility	30	3,164.40
Members who have repaid and not renewed loans	106	—
Total	1,833	934,068.62

In addition to the co-operative credit societies there are two large co-operative selling societies, that of *Carmel* in the *Rischon-le-Zion* colony which sells wine and has branches in many places, and that of *Pardus* which sells oranges and has its headquarters in the *Petach Tikwa* colony.

The development of the *Pardus* society from 1908 to 1910 was as follows:

Year	Membership	Cases of from 140 to 150 oranges	Value
			francs
1908	25	41,591	230,196
1909	30	57,695	305,790
1910	29	95,078	355,480

There are three consumers' co-operative societies in the *Sedyera* colony in Galilee and a co-operative society for the insurance of cattle.

In order to improve agricultural methods and increase the yield of the colonies, an agricultural experimental station has been instituted on the initiative of American Jews on land belonging to the National Fund. This land measures 45 hectares and is situated at Atlit, near Caiffa. The total annual receipts and expenditure of the enterprise amount to 400,000 francs. The laboratories and other buildings and plant of the station are placed in the *Zikhron Jakob* colony.

In the matter of agricultural instruction we should recall, above all, the school of which we have already spoken and which was founded in the *Mikve Israel* colony by the Universal Alliance of Israel, and also the German Jews' college for general education in Jerusalem which has a special agricultural course. At the conclusion of this course the students go to work in the colony's field for the practice of agriculture. In 1910 an agricultural experimental school for girls was founded at the expense of the National Fund and with the support of the Jewish Women's Association for Agricultural Work in Palestine. This school was founded in the *Kineret* colony which lies at the mouth of the Jordan, on Lake Tiberias. Its course lasts for two years. The girls are taught domestic economy, dairy work, poultry keeping gardening, etc. The Frankfort committee also founded a girls' School of Popular Economy in the *Petach Tikwa* colony in 1913.

Since 1911 an agricultural paper has been published in Jaffa. It is called *Hackekter* (The Agriculturist), is published in Hebrew, and seeks to spread information as to the progress realized in the agricultural and related fields. The last institution of instruction and propaganda founded was the Agricultural Society of Palestine, constituted in 1914, immediately before the war, in the *Mikwe Israel* colony, where the first Jewish colony of Palestine was founded in 1870. The members of this society are agricultural experts and colonists who have had practical training in agriculture and aspire to contributing to the country's economic development.

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Urban colonization is also much encouraged by the Jews in Palestine, with a view to attracting the most well-to-do classes, who establish themselves in towns, and to providing an easy market for the produce of neighbouring Jewish colonies. Such colonization has been very active in the neighbourhood of Jaffa, where a sort of suburb, *Tel Aviv* or Spring Hill, has been established. With its wide and clean streets and its dwellings supplied with all the apparatus of modern comfort, it resembles a modern European garden-city. The National Fund has through the medium of the Anglo-Palestine Company contributed 250,000 francs to the making of this little Jewish town.

Of the circumstances which have most hindered the economic development of the country two should be named, interior customs and the due of 11 per cent. of value payable on all imported merchandise Several industrial establishments have been set up—some oilmills, a factory where packing material and barrels are made, workshops for the repair of machinery, etc. The building industry has developed to some extent. There are two glass works in the country, and cement, scent and edible paste factories. The lace industry has spread widely, thanks to the Jewish Women's Association for Agricultural Work in Palestine, in most of the colonies, and in many towns, as in Jaffa, Jerusalem, Tiberias, etc., where more than 400 girls are at work. In order to form a skilled and a managing staff the Academy of Applied Arts or *Bezalel* was founded in 1904. It had, in 1912, 430 pupils distributed in eight sections, namely the woodwork, ivory-work, carpet-weaving, lacemaking and other sections. This school's rapid development appears from the fact that the total value of the goods it produced was 20,000 francs in 1908, 90,000 francs in 1910 and 250,000 francs in 1912. Thus in only four years it was more than multiplied by twelve.

Such are the results to which Jewish colonization in Palestine has, in face of great difficulties, hitherto attained. They allow of good hopes for the future.

GREAT BRITAIN AND IRELAND.

WOMEN AND AGRICULTURE IN GREAT BRITAIN.

SOURCES:

THE JOURNAL OF THE BOARD OF AGRICULTURE, Vol. XXV, No. 7 London, October 1918. Articles by HALL (Sir A. D.) Permanent Secretary, Board of Agriculture and Fisheries; TALBOT (Meriel L.) Director, Women's Branch, Food Production Departament; LYTTLETON (The Hon Mrs. Alfred), Deputy Director, Women's Branch. Food Production Department; MACQUEEN (M M), Chief Educational Adviser, Women's Branch, Food Production Department; SILYN ROBERTS (Mrs. M), Administrative Inspector, Women's Branch, Food Production Department; HADOW (Grace), Vice-Chairman, National Federation of Women's Institutes; CALMADY HAMLYN (Sylvia), Hon. County Organizing Secretary for Devonshire, Women's Branch, Food Production Department

THE JOURNAL OF THE BOARD OF AGRICULTURE, Vol. XXII, Nos. 6 and 7. London, September and October 1915. Report by WILKINS (Mrs Roland) on the Work of Educated Women in Horticulture and Agriculture.

HEATH (Francis George): British Rural Life and Labour P. S. King and Son, London, 1911.

§ 1. WOMEN IN AGRICULTURE BEFORE THE WAR.

A. *Peasant Women.*

One of the great changes brought about in Great Britain by the European war affects the contribution of women to agriculture. Until the 'seventies of the nineteenth century peasant women still habitually worked on the land throughout England and Wales. It is interesting to notice however that from about 1840 disinterested public sentiment was increasingly opposed to such employment of them. It was objected that girls who worked in the fields grew up ignorant of the simplest domestic economy, for they had none of the practical education received by those who helped their mothers in the cottages and those who went out to service. As for married women who were agricultural labourers they were, necessarily, neglectful mothers and housekeepers. The demand for women's labour in agriculture was ascribed to its cheapness. When the practice of employing them on farms fell into disuse persons interested in social progress rejoiced. Mr. Francis George Heath, an authority on rural economy in Great Britain, hailed in 1911 as "a very satisfactory sign of the times" the conditions described by the following extract from a Board of Trade report:

"It may be stated generally, that, with the exception of Northumberland and Durham, there are no counties in England where the employment for wages of women at ordinary work in the fields is a general custom. The

practice of employing women and children on the land largely declined in the early 'seventies, and in the early 'eighties it had almost entirely ceased in many districts. But on small farms, particularly in the northern districts, the wives and daughters of the owners or tenants frequently assist in the fields, particularly at busy times. There are however districts, besides those in the north, where women are engaged for wages at certain outdoor work, such as hoeing and weeding and picking stones, potato lifting, and during hay and corn harvest. The practice is however becoming less common every year owing to the difficulty of getting them to undertake such work. In the fruit and flower growing districts and also in the hop districts they are often employed at certain seasons. Unmarried women are frequently engaged for farmhouse work and dairy work. In the buttermaking and cheesemaking districts it is stated that they are becoming more difficult to procure. In some districts, particularly in the north, the women engaged for farmhouse work frequently feed calves, pigs and fowls, and are often also expected to help at haytime and harvest if necessary ".

As regards Wales, it was stated in 1911 that the custom of employing women for fieldwork was dying out. Women who still gave labour of this description were usually unmarried, and were engaged by the year or the half-year and lodged and boarded in the farmhouses. In the counties of Cardigan, West Carmarthen and North Pembroke they were employed in these conditions, but to a lessening extent. Elsewhere in Wales, Mr. Heath states, women's work on the farm was taking " its proper course ", being " concerned with such labour as a woman can properly perform — work in and about the farmhouse and sheds — feeding pigs, calves, cows, poultry, milking, and inside cooking, and domestic work of different kinds ". The women however helped with " the usually urgent work, of harvests, both hay and corn ingathering ".

In Scotland women were still largely employed in agriculture up to the very eve of the war. To quote from the Board of Trade report previously cited:

" In all parts of Scotland women are frequently employed at fieldwork, taking part in the ordinary work of the farm. The women workers are generally the daughters (particularly in the Border counties and the Lothians), sometimes the wives, of the men living in cottages and working on the same farm. Near towns and collieries they are, however, sometimes the daughters of artisans and colliers. In Ayrshire and other dairy districts the women workers usually do milking and dairy work as well as fieldwork and the ploughmen's wives often help at milking. In some districts in the south-western counties a cottar woman or 'byre woman' is engaged to look after the dairy cows and other cattle and to do the milking. A number of young women are also hired for farmhouse and dairy work. On some farms the female servants who live in the farmhouses assist in the housework and in the farmsteadings and also do fieldwork. It is now a frequent complaint that it is most difficult to get female servants for farms, as the young women prefer situations in towns. For the same reason 'outworkers' (women not living in the employer's farmhouse) are also said to be getting scarcer.

Employers also state that the wives of ploughmen are less inclined to undertake fieldwork or milking. Girls from the western islands take service in farmhouses in some counties for certain periods of the year; but it is stated that not so many come now as formerly. The number of women workers in Scotland is large, particularly in the arable districts, and especially in the Border counties and the Lothians. In these districts the number of women workers is nearly equal on many farms to the number of men; and on some farms, where potatoes are largely grown, there are sometimes more women than men. It will be readily understood that it is a great advantage to the Scottish employer to be able to secure the services of a considerable body of strong and active young women for fieldwork at about half the wages of the men, especially in connection with the various operations incidental to the growth of large potato and turnip crops".

Thus, before the war, while in Scotland women still made an important contribution to the supply of agricultural labour, in England and Wales the practice of employing them on the land was falling into desuetude. Its decline was assisted by prejudice, by a feeling on the part of English and Welsh peasant women themselves that farm work was degrading, so that even when they undertook it they were ashamed of doing so, and by a prejudice among English and Welsh farmers against women's labour.

B. *Women of the Educated Classes.*

From about the year 1892, when the Women's Horticultural College at Swanley in Kent was founded, a certain number of women of the middle class acquired a training in horticulture or agriculture with a view to earning a living or supplementing a private income. Such training in horticulture could be received in 1914 at some ten smaller schools as well as at Swanley College. Instruction in both horticulture and agriculture was provided at the Horticultural College at Studley in Warwickshire, at University College, Reading, and at county council centres at Hutton in Lancashire and at Chelmsford in Essex; while the Midland Agricultural and Dairy College of Kingston in Derbyshire gave training in agriculture only. These schools awarded diplomas or certificates to students who had completed courses lasting from one to three years, and some of them also provided, especially in the case of dairy work, short courses of four or more weeks.

The women who received a training of this description formed only a small class. A certain number of them became small holders, utilizing their land as market or nursery gardens, as small mixed farms where dairy-farming, market-gardening, beekeeping, the keeping of poultry, pigs and goats, and even corn growing were carried on in varying proportions, as small dairy farms and as poultry farms. It was found in 1915 that quite a number of women who had been able to invest some capital in small holdings of this kind were successfully earning a living or supplementing an inadequate income. One or two women were running cheese factories. Others were supporting themselves by imparting the knowledge of horticulture or agriculture they had acquired.

Another section was constituted by those who were wage earners. Among these the gardeners, whether jobbing gardeners or gardeners in regular employment, bulked most largely ; but there were also some manageresses of commercial dairies and cheese factories and of exhibition poultry farms. and some assistants to poultry farmers and breeders. Only two women farm bailiffs were discovered before the war. On the whole, the salaries earned by educated women in agriculture and the amount of leisure they enjoyed compared unfavourably with those obtained in other professions.

§ 2. Women in Agriculture during the War.

A. *Organization and Training.*

Early in the war it became evident that it would be necessary to use women to fill the places of men taken from agriculture for the army.

In the first months of 1916 the first woman inspector of the Board of Agriculture was appointed to work in close co-operation with the women inspectors of the Board of Trade ; and later in the same year the whole organization of women's agricultural labour was transferred from the Board of Trade to the Board of Agriculture. In January 1917 the President of the latter Board decided to entrust such organization to a Women's Branch of his department. He appointed the first woman inspector as director and another woman as deputy-director of the new branch, which these two officials thereupon organized. Subsequently the president formed within the Board of Agriculture a Food Production Department of which the Women's Branch was thenceforth part.

Such is the constitution of the central authority which organizes the agricultural labour of women in England and Wales. The local organization is prior to it in date. Already in 1915 the President of the Board of Agriculture had asked the Board of Trade to utilize the machinery of its labour exchanges in order to help the War Agricultural Committees, which had been established in every county (1), to set up parallel Women's Farm Labour Committees. Berkshire had already established such a women's committee on its own initiative and other counties quickly followed this example. The committees are in some counties sub-committees of the War Agricultural Committees but in others they are more independent. Each county is divided into districts and each district has a District Committee which elects representatives who form the executive of the county committee. Each District Committee is itself elected by the village registrars within its area. There is thus a complete network of organization which enables the utilization of all local supplies of women's labour, and the distribution of this labour on a co-ordinated plan.

It has been seen, however, that in England and Wales at any rate, the

(1) See our issue for August 1917 page 80.

number of women who had any agricultural skill was very inadequate to the need. The problem which arose was twofold: it was necessary both to find women willing to do the work and to train them.

The first organized attempt to give the required training was made in 1915 by the Board of Agriculture and Fisheries. It entered into an arrangement with the various agricultural colleges and farm institutes according to which they trained as milkers and farm workers women for whom the board provided scholarships. The training thus given lasted at first only for two weeks, but as the result of experience this period was extended to four weeks in which it was found possible to make the women really useful. In the autumn of 1916 the Board of Agriculture gave further help. In the first place it offered to local education authorities grants which would cover two thirds of any expense incurred in training women for agriculture. In the second place it provided a number of scholarships of £4 each which pay for four weeks' courses of instruction at certain recognized institutions. A scholar must be passed by the competent Women's Agricultural Committee and must guarantee that she will give a certain period of service on the land after her training. Several of the voluntary organizations which have secured workers have taken advantage of these scholarships. They have however been of especial use to women of the farming class who, as men have been called to the colours, have suddenly found themselves obliged to undertake unaccustomed work on farms. In certain districts these scholarships have had an influence which should be lasting, for they have proved the value of knowledge and have aroused a desire for it.

But the women of the farming class, the women already living in country districts and forming local supplies of labour, were not enough to meet the need for workers; and it was necessary to draw largely on other classes.

Towndwellers were recruited. It was found, in particular, that the enterprise and energy, and in many cases the exemption from immediate necessity to earn a livelihood, of girls of the upper and middle classes of society, made them available as material for forming the new women labourers. It is chiefly they who have formed the important Women's National Land Service Corps and Women's Land Army.

In 1915 the Women's Farm and Garden Union made the experiment of establishing a training centre, under a women superintendent, on a farm which was lent to it. The period of training was fixed at twelve weeks during which students were instructed in all kinds of farm work. The union paid the cost of instruction, but the students in most cases paid for their own maintenance. All of them found employment as soon as they had finished their training. The experiment was in fact so successful that it led to the formation in 1916 of the *Women's National Land Service Corps*. The recruits of this corps are trained under the auspices of the Women's Farm and Garden Union at the various farms lent to this union. When these farms have been unable to accommodate all of them recourse has been had to the agricultural colleges and farm institutes. Training for the corps has always lasted six weeks and has aimed definitely at producing cow-women and horse-women. Most members of the corps have paid for

their maintenance during the period of training, but subscriptions have enabled a certain number to be trained without expense to themselves.

The *Women's Land Army* was formed in 1917. It drew largely upon the Women's National Land Service Corps in order to provide itself with instructresses, group leaders and forewomen. Its recruits have been mainly town girls ; and have all reached a certain standard of character and of health.

The organization of the Land Army was brought into relation with the existing organization of women's labour. The Women's War Agricultural Committees were asked to set up Selection Committees to choose the recruits ; and these committees decide in the case of each candidate for the army whether she is 1) sufficiently skilled to go on to a farm as a paid worker immediately, 2) in need of training, or 3) unfitted for agricultural work. If passed by the committee she undergoes a medical examination. When she has the requisite skill, as the result of a training given her by the army or otherwise, she is placed by the County Secretary and the County Committee. The farms on which workers are placed and the accomodation provided for them are inspected by the Village Registrars and the District Representatives. Special officers have recently been appointed to watch over the welfare of members of the Land Army.

Three methods of training are followed by the Land Army :

1) A farmer is allowed to have for three weeks the services of a recruit to whom he pays no wages and for whose maintenance the army pays. He trains her for the work for which he requires her, and employs her on it, paying her wages after the expiry of the three weeks. The drawback to this plan is that the farmer is apt to train the woman only for a particular process, necessary only in a particular season.

2) A farmer undertakes to train one, two or more women for a period of from four to six weeks. The Land Army pays for their maintenance and they give their labour in return for their training. When trained they are transferred to paid employment under other farmers. The success of this plan depends upon whether a farmer can gauge correctly the amount of work which may be given to a raw recruit, whether he can teach methodically and skilfully, and whether he has time to supervise the work of the learners.

3) Recruits are housed in a hostel supervised by an instructress and a housekeeper. It is usually situated on a farm which gives adequate facilities for training recruits or in the centre of a district in which there are several farms where such training can be received. For the first six months after the army was founded the training lasted for only four weeks but this period was afterwards extended to six. This method of training is perhaps the most successful.

Most often it aims at producing women who can work among horses or stock, but there are exceptions to this rule for in some counties it is the general farm labourer who is chiefly in request. Training in particular subjects, such as thatching and hedging, is also given, usually in special classes which are sometimes attended by women already in employment.

Special centres have been established for the instruction of women trac-

tor drives for whom there is an increasing demand. Their training lasts for from four to six weeks. In the winter of 1917-1918 the Office of Woods gave short courses of instruction in planting forest trees in the Forest of Dean, with the object of producing forcwomen who could direct gangs of women labourers working at afforestation.

B. *The Work of the Women.*

The extent to which women have increased the supply of agricultural labour in Great Britain may be estimated from the fact that between March 1917 and October 1918 the Women's Land Army alone supplied some 16,000 women for field and other farm work, exclusively of those who went directly to work for the Timber Supply and Forage Departments.

It is estimated that of the women who have gone into agriculture only 16.1 per cent. have failed for reasons of health to do useful work. Women have naturally been more successful in some branches of agriculture than in others. They have distinguished themselves particularly in milking and other dairy work, in the care of young stock, in certain kinds of field work and in the lighter works of forestry. In threshing, thatching and driving motor tractors they have also met with remarkable success. On the whole they do best on tasks which require knack, deftness of hand and personal interest and care. It has been found that heavy, monotonous labour tends to weary them physically and mentally, and sometimes produces in them a reaction dangerous to discipline.

"Having admitted", writes Miss Meriel Talbot, Director of the Women's Branch of the Food Production Department, "that we had perforce to send out material which required a good deal of moulding by the farmers themselves, ... and admitting, moreover, that the new labour was apt to be somewhat lacking in stability even when it had proved its technical value, we claim that the newly trained woman of the summer of 1918 has a greater practical value that the woman of the summer of 1917. She has had the ground prepared for her in countless ways, and we ourselves have learnt how to equip her to more immediate practical advantage. She is, moreover, less diffident and more sure of a welcome. We claim that women's labour has proved itself a worthy substitute for men's labour in a time of emergency, not only by what women have attempted but by their actual achievements. We claim more than this; we say that in spite of the fact that a woman's working methods are different temperamentally from those of a man, she has proved, and it has come as a welcome surprise to the farmers, that she is capable in many kinds of farm work of achieving the same ends. We venture to think also that she has been a factor in widening the sympathies and the judgement of those who watched her first efforts with some scepticism and who accepted her labour with so little willingness. By 'sympathy' I mean very practical consideration in the matter of a decent living wage, of the necessity for good housing, and for some personal con-

sideration as to health, bad weather and hours of work. The farmer will be none the worse for the loss of some of his conservatism ".

On members of the army themselves, and in particular on those of them who have come from large towns, in some cases the slums of towns, the work has had an excellent effect as regards their health, their nerves, their powers of initiative and their zest for life.

In speaking of the contribution of women to agriculture we must not omit their gardening. The number who are gardening for private employers has largely increased during the period of the war; others are working in their own gardens ; and many more are cultivating allotments.

§ 3. The prospect for women in agriculture.

In considering the question of whether women workers will remain in agriculture after the war the fact must first be acknowledged that many of them wish to do so. They have acquired a taste for the work and discovered the benefit they derive from it.

The question that remains is whether they will still find employment after the emergency created by the war has ceased to exist. Farmers have many of them been converted to a favourable view of their activities; but whether or not their superior adaptability and quickness will ever or often cause them to succeed in competition against men for places as wage-earning labourers remains problematical, as do also the degree of severity which the conditions of the labour market will give to such competition, and the extent to which the women will embark on it.

The number of women who are independent farmers will almost certainly increase after the war. Sir A. D. Hall, Permanent Secretary of the Board of Agriculture and Fisheries, recommends that they do not become small holders because a successful small holder must give a very large share of his time and personal labour to work on and for his land. So far, co-operative agricultural societies, whether for marketing produce or acquiring supplies, machinery and implements, have had in England too little development to be of much use to the small holder. Sir A. D. Hall advises rather that women should undertake large farms on a system of co-partnership. A precedent is afforded by the fact that Great Bidlake Farm in North Devon was successfully farmed, by women only, in 1917-1918.

In considering women who belong to the agricultural class, the wives and daughters of farmers, ploughmen and other agricultural labourers, we are on less speculative ground. The prejudice many of these women previously entertained, in common with their menfolk, against the work of women on the land has been largely overcome by the example of the Land Army. Moreover their ideal of achievement has been raised. Many of them have, in particular, become anxious to receive training in milking,

hedging and thatching. It is probable therefore that they will henceforth participate to a larger extent and with more goodwill than before in the labours of agriculture.

Something has been done during the years of war to make country life more attractive to women. It has been recognized that a factor in the exodus from the country to towns, which did much for several decades before the war to lessen the agricultural production of Great Britain, was the dulness and the hardness of countrywomen's lives. Since 1915 the Agricultural Organization Society has endeavoured to found in the villages of England and Wales Women's Institutes like those which are so popular in Canada (1). These institutes provide the women with a social life, teach them, in an attractive way, some domestic and some agricultural economy, and in certain cases found or revive such rural industries as basketmaking and toymaking. In 1917 the movement for the foundation of Women's Institutes spread to Scotland where it has met with considerable success.

(1) See our issue for May 1917, page 17

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

CANADA.

LAND SETTLEMENT BY DISCHARGED SOLDIERS AND SAILORS — *The Labour Gazette*, Vol. XIX, No. 1 Ottawa, January 1919.

The Soldiers' Settlement Act, 1917, which was passed with the double purpose of helping returned soldiers and sailors to settle on the land and of increasing the agricultural production of Canada, applies to all honourably discharged members of the Canadian, British or allied forces who were British subjects and resident in Canada before the war. It also applies to widows of any such soldiers or sailors who died on active service.

The Act provides for the granting to a settler of free entry on 160 acres, subject to certain necessary conditions. It also provides for making to those entitled to its benefits loans up to a maximum amount of $2,500, secured by a first charge or first mortgage on the land and bearing interest at the rate of 5 per cent. per annum. The money lent may be used to acquire land for agricultural purposes, to pay off encumbrances on it, to construct farm buildings and to buy stock, machinery and equipment. The amount of the loan must in each case be justified by the value of the security offered, and it must be spent under the supervision of a board of commissioners.

A board known as the Soldiers' Settlement Board and consisting of three commissioners was appointed under the Act, for the purpose of administering it, in February 1918. There is a representative of the board in each province, and applications for loans may be made to him by returned soldiers in respect of agricultural land in any situation.

According to an analysis, made by the Department of Soldiers' Civil Re-establishment, of registration cards filled in by 230,000 members of the forces overseas in April 1917, more than 105,000 men have expressed a definite wish to farm in Canada after the war. Of this number 78,000 have had previous agricultural experience, 61,000 of them three or more years of such experience. Of these 105,000 men, 96,000 stated that they wished to avail themselves of the assistance given to agricultural settlement, while about 50,000 declared their willingness to work for wages in order to gain experience. More than 25,000 men expressed the wish to settle in Ontario while 23,000 chose Alberta and 15,000 British Columbia. It is of course recognized that some men may have filled in their cards without any very serious intention of going on the land, but it is thought that these men would not number more than 70,000 or about 7 per cent. of the total number.

Preliminary steps have already been taken by the Soldiers' Settlement Board in conjunction with the Militia Department and the Khaki

University to establish in Great Britain a number of training farms to be used during the months over which demobilization extends. These farms will provide courses of intensive instruction lasting about three months in the essentials of farming under Canadian conditions. The courses are intended to do no more than take the men from the stage of complete ignorance of farming to that of a sufficient working knowledge to make a man self-supporting practically from the time he goes upon the land. It is intended however to inaugurate in Canada, with the co-operation of the provincial agricultural departments, a scheme for following up this preliminary instruction so that the men will be advised and instructed after they have actually gone on to the land. Experienced men will of course be allowed to take up land without such instruction.

Up to the 15th of last October 620 soldiers had entered on holdings under the Act. Of them 483 held 1,123 quarter sections under homestead titles. Up to the 31st of October loans to 975 soldiers, amounting to $1,239,685, had been approved.

Certain Dominion lands which were formerly a part of the Doukhobor reserves and are specially valuable have been reserved by the Ministry of the Interior and set apart for " soldier entry ". But as the demand for free entry on these valuable lands will be excessive, and it will be difficult to distribute it equitably and so as to include soldiers who have not yet returned, the governemnt has passed an order-in-council authorizing any specially valuable lands becoming available for soldiers' settlement to be disposed of later, and the Soldiers' Settlement Board to let such lands in the meanwhile, on lease or otherwise and on fit conditions, preferably to returned soldiers. The proceeds of such letting will be placed to the credit of a fund to be known as the " Soldier Land Settlement Fund ".

DENMARK.

SALES AND PRICE OF RURAL LAND IN 1917. — Declarations as to sales and areas sold (1) (2).

During the years from 1911 to 1913 and the first half of 1914 the market for rural land was very lively. Then the war broke out, and as a result of the insecurity produced by the war there was, as it were, a pause of expectancy, an arrest of business of this kind. The fall thenceforward in the number of sales lasted until about the middle of 1915. At that time a rise was resumed, and during 1916 and 1917 there was, as the figures we print below show, a far larger number of sales of rural holdings than in previous years (3).

(1) Note sent up by our correspondent in Copenhagen.

(2) The "*hartkorn*" ton is a measure of land valuation established for the purposes of the land tax and based on the normal farming value of land The average area of the hartkorn ton is about 10 hectares

(3) It should be noted that in this report on sales the total number of conveyances, and also changes produced by inheritance, have been taken into account

Year	Number of properties sold having an area of at least ¼ hartkorn ton	Year	Number of properties sold having an area of at least ¼ hartkorn ton
1911	11,229	1915	9,587
1912	11,227	1916	12,621
1913	10,931	1917	12 732
1914	9,411		

Of the 12,700 rural properties having an area of at least ¼ hartkorn ton which were sold in 1917, 5,500 were farms, and 7,200 were workmen's holdings of an area less than a hartkorn ton Of the 12,700 properties, 2,500 were uncultivated land, mostly lots of less than a hartkorn ton.

Of the total number of properties offered for sale, 1300, including 80 0 farms, were conveyed to persons of the same family as the selling owners. Quite 400 sales of rural property were exchange transactions. The number of forced sales was only 42.

The area of land which changed owners in 1917 was about 22,800 hartkorn tons, or 6 per cent. of the total area of the country. It should be noted that there is a certain although insignificant area which belongs to institutions and therefore cannot be sold. The area sold in previous years was 24,200 hartkorn tons in 1914, from 17,000 to 18,000 in 1915, and an annual average of from 21,000 to 22,000 between 1911 and 1913.

Although, as has been said. a less number of farms than of workmen's lots (including uncultivated lots) was sold, the sale of farms had naturally most economic importance since it implied the conveyance of 19.100 tons and that of workmen's lots the conveyance of only 3,700 tons of land.

Selling Price of Real Estate and Buildings. — The average purchase price of rural property is calculated on information as to conveyances. Almost always only the cultivated area is given, the total area hardly ever ; and therefore the valuation of the utilized land has to be taken as a basis in drawing up the statistics showing the value of landed property.

In 1917 the average selling price of rural land, without taking into account the various kinds of stock, was taken to be 10,600 crowns a hartkorn ton in the case of farms and 18,100 crowns in the case of workmen's lots of less than a hartkorn ton. In calculating average prices only voluntary sales were taken into account, both forced sales and sales between members of the same family being excluded. The sales of uncultivated land were left out and not considered.

As regards kinds of farms, the selling price per hartkorn ton was, as usual, higher for the small than for the larger farms : thus for farms of from 1 to 2 hartkorn tons it was 13,000 crowns ; for those of from 2 to 4 hartkorn tons 11,100 crowns ; for those of from 4 to 12 hartkorn tons 9,800 crowns ; for those of more than 12 hartkorn tons 9,900 crowns.

As has been usual in recent years, selling prices in 1917 were essentially higher in Jutland than in the islands. The average price per hartkorn ton of farm land was about 9,800 crowns in the islands and 11,400 crowns

in Jutland : for workmen's lots the corresponding averages were 16,400 crowns in the islands and 18,900 crowns in Jutland.

The distinct rise in recent years on the price of rural property was maintained and even accentuated in 1917. Thus a hartkorn ton of farm land sold in 1917 for 1000 crowns more than in 1916, and in the case of workmen's lots this increase was as much as 1700 crowns.

Selling Price of Stock and Chattels. — The chattels and stock belonging to a rural property are generally sold with it. The value of the chattels per hartkorn ton increases at a lower ratio to the area than do the land and the buildings. Thus the greater the property, the less is the value of the chattels and stock per unit of area.

On all the land considered, the average value in 1917 of chattels and stock per hartkorn ton was 6,400 crowns on workmen's lots ; 5,000 crowns on properties measuring from 1 to 2 hartkorn tons ; 3,900 hartkorns on those measuring between 2 and 4 hartkorn tons ; 3,300 crowns on those measuring between 4 and 12 hartkorn tons ; and 2,600 on the largest farms, namely those having an area of more than 12 hartkorn tons.

Here also there is a difference between the various parts of the country. Thus in 1917, the average value per hartkorn ton of chattels and stock was calculated to be on workmen's lots, 4,600 crowns in the islands, 7,300 crowns in Jutland and in the whole country 6,400 crowns ; on farms, 2,900 crowns in the islands, 4,200 crowns in Jutland and 3,600 crowns in the whole country.

The rise in recent years in the value of chattels and stock which is reflected in the level of wartime prices, whether of the live stock used on farms or of produce, was maintained in 1917 but was far less considerable than in the immediately preceding years, as appears from the following figures :

Chattels and Stock.

Year	Average purchase price per hartkorn ton	
	Workmen's lots	Farms
—	crowns	crowns
1914	3,962	2,254
1915	5,100	2,888
1916	6,251	3,305
1917	6,443	3,582

The figures reproduced serve to show the rate of the rise in prices. They also recall that during the period of the war stock was often reduced in quantity, so that at the end of this period the number of farm animals sold was on the average less than at the beginning. The increase in the value of chattels and stock, as shown by the figures, was therefore all the greater.

Total Selling Price of Rural Properties. — If the value of chattels and stock be added to the sale price of land and buildings, given above, the total price of a property is obtained. In the whole country this price was, on

an average, about 24,500 crowns per hartkorn ton for the workmen's lots and about 14,200 crowns for the farms. Here also uncultivated land has not been taken into account.

During the farming years from 1870 to 1885 the highest average annual selling price of a hartkorn ton of farm land, including the value of chattels and stock, was about 7,890 crowns, that is 6,400 crowns less than the average price in 1917. From 1885 to 1901 the prices of land fell then in 1906 and 1907 they returned to the level at which they had stood about 1885. The following figures, which include the value of chattels and inventoried stock, show what was the increase in these prices from the 1902-1907 period onwards.

Average Selling Price, including Value of Chattels and Stock, per hartkorn ton.

Year	Workmen's lots of less than a hartkorn ton	Farms of more than a hartkorn ton
—	crowns	crowns
1902-1907 average	13,100	7,300
1908-1912 »	16,000	8,900
1913	18,500	10,500
1914	19,600	11,000
1915	21,000	11 800
1916	22,700	12,900
1917	24,500	14 200

Conveyance of Rural properties. — The increase in the number of sales of rural property continued on a greater scale in the first half of 1908 than in any other period. The sales in 1916 and 1917 numbered 12,600 and 12,700 respectively ; and in only the first six months of 1918 they numbered 11,400. The following figures show the course of this increase, indicating its quarterly progress.

Periods		Number of sales
January-March	1917	3,300
April-June	1917	3,400
July-September	1917	2,800
October-December	1917	3,200
January-March	1918	5,000
April-June	1918	6,400

This increase affected the whole country, but certainly in different degrees. In the first half of 1918 the number of rural properties sold in the Bornholm district was twice as great as in the first half of 1917 ; in the north of Jutland the increase was one of about 90 per cent., in the south-east of Jutland 80 per cent., in the south-west of Jutland 65 per cent., in Lolland Falster about 60 per cent., in Fionia 50 per cent. in the island of Seeland a little less than 50 per cent.

GERMANY.

NEW AGRICULTURAL LABOURERS' CODE IN GERMANY. — *Frankfurter Zeitung*, 31 January 1919

On 30 January the German government issued a new code intended to regulate conditions of labour on the land, to check the exodus from rural districts and to attract urban wage-earners to agriculture. In particular it deals with the question of dwelling accommodation for agricultural labourers Hitherto agricultural labourers have been at a disadvantage under the Civil Codes of the various federal States. Thus in Prussia under a law of 1854 agricultural labourers have been liable to a year's imprisonment if they " take concerted action for causing persons in the service of a certain employer or number of employers to go out on strike, or if, with a view to obstructing the work of such persons, they endeavour to compel either the employers or the authorities to do certain things or to grant certain concessions ". In future the provisions of the Civil Code with regard to contracts of service are to apply to persons engaged on agriculture, forestry and kindred occupations.

The main provisions of the new Agricultural Labourers' Code are as follows:

Hours of Labour. — The number of daily hours of labour is not to exceed, on an average, eight for four months of the year, ten for other four months, and eleven for the remaining four months. Payment for overtime is at a special rate. The time spent in going and coming between the farm and the place of work is included in working hours but not the interval for rest nor the time spent in baiting horses or oxen. In the summer half of the year at least two hours' rest a day must be allowed.

Wages. — As a rule wages in cash must be paid by the week. Where payment is partly in kind the produce paid must be of the average quality of the year's crop and must be measured by the metric system. Payments in kind must be made quarterly in so far as the nature and use of the produce allow. Where the produce due as wages in kind cannot be delivered its value must be paid in cash, reckoned according to the official maximum producers' prices, or, failing such, according to the maximum prices obtaining in the nearest market.

Since dwelling accommodation, allotments and other allowances often form part of labourers' pay, they must, if they have been guaranteed by the employer as part of such pay and if they have no market value, have their monetary value determined and recorded in writing.

When contracts of service have been concluded for the period of a year the pay must be distributed evenly over the various seasons. Should there be a breach of a contract of service the deduction from wages by way of penalty must not exceed one fourth of the cash wage due, and in the aggregate such deductions must not exceed fifteen times the local standard daily wage for common labour, as laid down in the National Insurance Code.

At least one tenth of the local standard daily wage, as laid down in

the National Insurance Code, plus a 50 per cent. bonus, must be taken as the hourly rate of payment for overtime. In estimating payment for overtime the time occupied in baiting and looking after cattle must be reckoned as overtime unless it be the local custom to include this work in the contract of service. Other urgent kinds of work done on Sundays and holidays must be paid for at the rate of double the daily wage locally current under the National Insurance Code.

Workers' Committees. — The new code provides that a workers' committee shall be formed for each farm or other agricultural unit and shall draw up working rules to be conspicuously posted within the farm.

Protection of Women Workers. — Women agricultural workers who have charge of a household must be released from work in time to allow them to return home an hour before the principal mealtime. They must be released from work on Christmas eve, Easter eve and the day before Whitsunday. If they have to look after a large household or if they board workers not belonging to their own family they must not be obliged to work, except in cases of necessity, to an extent which seriously interferes with the performance of their domestic duties.

Dwelling Accomodation. — Housing accommodation must be unexceptionable from a moral and a sanitary point of view. In the case of a married couple it must be adequate, allowing for the number and sex of children. The dwellings of unmarried labourers must be durable, must admit of being locked up, and must be furnished at least with a table, bed, chair, lock-up cupboard, and washing accommodation.

Cancelling of Contracts of Service. — Violence, coarse insults, immoral incitements in the course of employment, obstinate refusal or neglect to fulfil duties, repeated irregularity in paying wages, bad food, insanitary housing, constitute sufficient grounds for the cancelling of a contract of service, but not political activity or agitation in connection with trade unions.

The code also provides for safeguarding the interests of pensioners, especially disabled soldiers, for the prevention and settlement of labour disputes, and for joint consultations between the employers' associations and the agricultural labourers' delegates.

The code had force from the day it was promulgated.

GREAT BRITAIN AND IRELAND.

SMALL HOLDINGS IN ENGLAND AND WALES. — *Report on the Working of Small Holdings acquired under the Small Holdings and Allotments Act*, 1908; London, 1918.

The Board of Agriculture and Fisheries recently circularized County Councils in order to obtain information with regard to the measure of success which had attended the small holders placed on the land under the provisions of the Small Holdings and Allotments Act, 1908. The Board realized that the majority of the County Councils were working with depleted staffs, but, in view of the problems which are under consideration with regard to land settlement, it was felt that the present was a suitable time to obtain information as to the result of the working of the Act.

Table showing Numbers of Councils' Tenants and Failures, together with Particulars of Rents Collected, Outstanding and Irrecoverable.

Counties	Total number of Council's tenants	No. of tenants who have quitted (excluding those who have died, joined the Army, or taken holdings elsewhere)	Number of tenants who must be regarded as failures	Total acreage occupied by such tenants	Percentage of failures to total number of tenants	Percentage of acreage occupied by such tenants to total acreage acquired or agreed to be acquired up to 31 December 1914	Total rents collected since 1 January 1908.	Arrears of rent		Percentage of irrecoverable arrears to total rents collected
								Outstanding	Irrecoverable	
					Per cent.	Per cent.				Per cent.
ENGLAND										
Bucks	235 & 3 Assocns.	—				—	47,302	50	27	·06
Cambridge	1,440	113	103	—	7	—	94,427	67	17	·02
Cheshire	181	5	5	112	2·7	2	81,142	6	16	·02
Cornwall	158	23	13	409	8	13	33,246	7	17	·05
Cumberland	—	14	8	193		38				
Dorset	147 & 3 Assocns.	1	1	47			28,459	10	8	·03
Durham	277	3	3	150	1	6	21,550	32	123	·6
Essex	192	52	47	373	24·5	9·5	35,355	18	125	·04
Gloucester	337	32	13	64	4		44,363	159	60	·13
Hereford	70	16	12	320	17	16	27,747	nil	136	·49
Herts	199	48	26	364	13		32,307	122	194	·6
Hunts	404	6	4	104	1	2	78,011	nil	115	·14
Isle of Ely	1,150						82,431		62	·07
Isle of Wight	53	7	3	78	5·7	8·3	10,443	18	24	
Lancaster	71	14	13	30	18	6	11,752	nil	218	1·8
Lincoln:—										
Holland	493	—	nil		—	—	116,131	nil	nil	nil
Lindsey	217	8(1)	6	240	2·8	5	51,561	44	4	·008
Middlesex	32		7	60	22	27	5,169	25	21	·04
Norfolk	1,350	144	77	824	5·7	6	151,286	61	91	·006
Northants	132 & 14 Assocns.	15	6	61	4·5		28,191	7	nil	nil
Northumberland	75	17	12	320	16	11	33,067	67	510	·9
Oxford	210	—	26	391	12·4	11·7	32,266	42	36	·01
Rutland	34	nil	nil			—	2,886	nil	nil	nil
Salop	—		nil			—	—	—		—
Somerset	550	43	15	340	2·7	3·7	137,410	58	112	·08
Stafford	117	15	12	266	9·5	8	39,185	100	263	·7
East Suffolk	83					—	11,288	11	61	·05
West Suffolk	231					—	22,924	64	14	·006
East Sussex	25	12		194	44	53	2,952	—	34	1·2
West Sussex	15	3		29	20	14	2,872	18	17	·6
Warwick	128	19		73	6	3·7	24,785			·008
Westmorland	10	3		21	20	22	—			
Wilts	312	19	18	310	5·8	5	55,410	123	21	·04
Worcester	500	16	11	111	2·2	4·4	33,991		78	·02
Yorks:—										
East Riding	223	36(2)	14		6·3	—	48,333	nil	14	·03
WALES										
Anglesey	79	nil						nil	nil	nil
Brecon	26		nil	nil	nil	nil	3,218	nil	nil	nil
Carmarthen	66		1	—	1·5	—	8,591	nil	nil	nil
Carnarvon	77	2		87	2·5	3·8	14,356	8	158	·005
Denbigh	175	3		100	1·7	2·5	30,233	nil	14	·04
Flint	51	6		112	3	11	12,787	19	63	·3
Montgomery	100			—	1		23,389	nil	nil	nil
Pembroke	47						11,216	nil	nil	nil

(1) Notices given by Council. — (2) Including deaths.

The table reproduced has been prepared to show, as far as practicable, the result of the Board's inquiry. Particulars are not available as regards certain counties, owing to the fact that some of the councils' small holdings staffs have been much depleted, either by the calls of military service or by the demands made on the time of officials who are working for the Agricultural Executive Committees which have been appointed to deal with questions of ploughing up grass land, cultivations, etc., etc.

Where particulars are not inserted in the table as regards any county no meaning can be attached to the absence of information, other than the fact that the council's staff was unable, in addition to its current work, to furnish the return asked for by the Board.

An examination of the figures showing the relatively small numbers of failures amongst small holders settled on the land under the Act, and the almost negligible amount of arrears of rent written off by councils as irrecoverable, indicates clearly that the results obtained under the Act may be regarded as successful, such as would compare favourably with those obtained on private estates. The personal equation will, of course, always enter largely into the question of the success or failure of a small holder. It may be noted that in many cases where small holders have failed, other tenants have been obtained by the council, who, in contrast to their predecessors, have made the holdings profitable, thus indicating that neither the land nor equipment caused the failure, but some lack of energy, experience or capital on the part of the original small holder.

RUGGERI ALFREDO, gerente responsabile

THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall:

(*a*) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets;

(*b*) communicate the above information as soon as possible to those interested;

(*c*) indicate the wages paid for farm work;

(*d*) record new diseases of plants which may appear in any part of the world, show ing the regions infected, the progress of the diseases, and, if possible, any effective remedies;

(*e*) study questions concerning agricultural co-operation, insurance, and credit from every point of view; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit;

(*f*) submit for the approval of the various governments, if necessary measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119 30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10*d.*	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	1*s.* 1 1/5*d.*	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	9 33/64*d.*	at par
1 Dollar, gold ($) (100 cents) (United States)	=	4*s.* 5/16*d.*	at par
1 Drachm, gold (100 lepta) (Greece)	=	9 33/64*d*	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1*s.* 7 33/64*d.*	at par
1 Franc (100 centimes) (France)	=	9 33/64*d.*	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 33/64*d.*	at par
1 Leu (100 statinki) (Bulgaria)	=	9 33/64*d.*	at par
1 Lira (100 centesimi, (Italy)	=	9 33/64*d*	at par
1 Litre	=	0.21998	gallons
		0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4*d.*	at par
1 Mark (100 penni) (Finland)	=	9 33/64*d.*	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	2*s.* 2 61/64*d*	at par
1 Milreis, gold (Portugal)	=	4*s.* 5 19/64*d.*	at par
1 Peseta, gold (100 céntimos) (Spain)	=	9 33/64*d.*	at par
1 Peso, gold (100 centavos) (Argentina)	=	3*s.* 11 37/64*d.*	at par
1 Pound, Turkish, gold (100 piastres) (Ottoman Empire)	=	18*s.* 0 15/64*d.*	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	2*s.* 1 3/8*d.*	at par
1 Rupee, silver (16 annas) (British India)	=	1*s.* 6*d.*	at par
1 Talari (20 piastres) (Egypt)	=	4*s.* 1 11/32*d.*	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	2*s.* 0 37/64*d.*	at par
1 Zentner (Germany)	=	110.23171	lbs.

YEAR X — NUMBER 5 ROME, MAY, 1919

INTERNATIONAL INSTITUTE OF AGRICULTURE

BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

ITALY.

THE CHIEF QUESTIONS DISCUSSED AT THE NATIONAL CONGRESS OF RURAL BANKS AND THE WORK OF THE ITALIAN FEDERATION.

SOURCES:

ATTI UFFICIALI DEL 1° CONGRESSO NAZIONALE DELLE CASSE RURALI (*Official Acts of the First National Congress of Rural Banks*). Rome, 26 and 27 September 1918. Federazione Italiana delle Casse Rurali. Rome, 1919.

LA FEDERAZIONE ITALIANA DELLE CASSE RURALI NEL 1918 (*The Italian Federation of Rural Banks in* 1918) (Limited liability co-operative society), Fourth report, January-August 1918. Rome, 1918.

On the initiative of the Catholic Federation of Rural Banks, a National Congress of Rural Banks, in which more than 1300 banks took part, was held in Rome on the 26th and 27th of last Septembers. The recent publication of the proceedings allows us to resume the principal resolutions passed at this congress and to touch on the principles which inspired them and the tendencies apparent when the various arguments advanced are examined.

§ 1. The questions discussed.

The first subject with which the congress dealt was the " principles of the organization " of rural co-operation for purposes of credit. With reference thereto a long resolution, containing a whole programme for the internal organization of the movement, was approved. The mover (Signor Rovigatti) championed an organization based on local federations which would be centres whence small rural credit would receive an impulse and be co-ordinated. Without their aid the single banks, operating in the narrow field of one village, could not have either the capacity, the initiative or the membership necessary to regular and effective working. Therefore no rural bank ought to remain isolated, and it was resolved to circulate as widely as possible from 30 June 1919 onwards the lists of the rural banks organized in federations, in order that the public might thus be able to know which banks were guaranteed by their specialized and technical organization and which preferred to remain in a very dangerous isolation. Energetic measures were taken to ensure to the local federations, with whose work we have several times dealt in this review, the staff and technical and financial resources necessary to their regular and active working. The federations are particularly vigilant that transgressions of rules or irregularities do not occur on any pretext, either on the administrative side, in that credits are opened, otherwise than the rules allow, for non-members or public or private bodies, or for members on a scale or for purposes outside the limits fixed by the meetings or inconsistent with the character of the rural banks, or on the technical and book-keeping side affecting the keeping of the obligatory books and documents and the production of these upon occasion.

Serious and drastic steps are taken against rural banks which will not follow the instructions of the local federation. All means are used to counteract any tendency which may show itself in banks to speculate : the separation of credit from every other form of business is promoted, and specific duties and responsibilities are distributed by the institution of new societies, better fitted to develop and carry on new activities, so that these are not confused with the affording of credit, the proper business of rural banks. When advisable, the adoption of a uniform set of rules, which can be modified to suit particular local needs, is advocated, and a technical staff, capable of directing and managing the societies, is formed by means of special courses in book-keeping. The congress also examines the relations which should be established with the local banks : it was decided that the rural banks should preferably be supported by banks belonging to the Italian Banking Federation, and that the federations should examine methods by which the work of the rural banks could gradually be done by representatives and agents of the banks of the Italian Banking Federation within the limits of their competency. Thus the cycle of the organization of credit could be completed and most useful services could be rendered to the agricultural population. A local federation would however be most active in

conducting periodical and extraordinary inspections, which would cover the whole work of the societies and ought to be most rigorous. The congress decided that the local federations might promote the dissolution and liquidation of banks which had not technical and economic resources sufficient to allow of their regular existence or activity or which did not attain the ends set before them.

The nature and working of a rural bank were also examined, and it was agreed to recognize it as " a rural co-operative society, aiming at raising the condition of its members, morally, economically and socially, facilitating and promoting their isolated and associated action by means of a right use of credit, and gradually taking the place, within its limited sphere of activity, of a centre of social life ". It is not therefore mechanical credit business but a scientific realization of the value of accumulated savings it behoves a bank to promote. To quote from the inaugural speech at the congress (1): " Once when usury eat into and gangrened the life of small country places, a rural bank could discharge a duty of economic improvement which was morally productive, even if it did no more than provide a till where deposits were received and whence loans could be made. But nowadays, a rural bank which lives enclosed by the limits of its own tiny accounts, and does not perceive the movement of rural changes which is taking place round about it, is inconceivable. The rural bank is acquiring conciousness of the position it occupies within the great framework of credit organization and the yet greater framework of the national economy ".

The second resolution approved by the Congress, on the proposal of Advocate Mangano, the mover, fixes the initiative which rural banks must take, especially in connection with after-war needs, and takes a wide and liberal view of the subject. When the problems of the land are concerned, the rural banks must do more intensive and more direct work in causing the rise of all forms of agricultural co-operation, such as collective leases, agricultural unions, dairy and winemaking societies, stores for products, etc.

The rural banks should promote and encourage the formation of those " family properties " (*beni di famiglia*) which tend to preserve and make more numerous small holdings, and which in many cases represent the system of land distribution most adapted to the needs of intensive agriculture. The rural banks should also promote and feed special enterprises for the purchase of agricultural machinery, selected seeds, manures and fertilizers. They should prepare to undertake, with the fit machinery, the work necessary to ensuring that soldiers who return to agriculture may derive the greatest advantage from the use made of the ex-soldiers' insurance policies. They should also consider the problem of making the emigrant as valuable as possible, either by giving him technical or social assistance, or by giving him other needed help, or by taking opportune local initiative. He should thus become, especially if he belong to the class of small leaseholders and

(1) See LIVIO TOVINI: *La Cassa rurale moderna* (The Modern Rural Bank), a speech delivered on 26 September 1918 at the First National Congress of Rural Banks. Federazione Italiana delle Casse Rurali, Rome, 1918.

permanently employed farm labourers, a skilled workmen. In view of the new duties of mutual associations, especially in the matter of the insurance of societies, the members of rural banks should constitute nuclei for the promotion and propagation of the new forms of thrift. In fact, the banks should be local centres for giving an impulse to and stimulating all the best energies, and, without losing their own character or altering their functions as bodies affording small rural credit, they should provoke and support initiative and enterprise which are to the advantage of production.

The question most lengthily and animatedly debuted in the congress was that of the technical form which a rural bank should have when it discharges these vast duties. Two tendencies were in conflict: the first would have maintained the traditional character of a rural bank, a small institution affording credit to members in its village; the other took into consideration the complex duties assigned to a rural bank, and aspired to extending its means of action, beyond the sphere now granted by the rules, by means of various forms of financing it and of granting credit. The solution adopted maintained in their general outline the criteria previously followed, which were founded on the principle of affording only individual credit to single members, but granted larger powers of supervision and assistance to the local federations.

A resolution was also approved which affirmed the defective efficacity of State agricultural credit, stated to absorb savings by means of the post-office savings-banks but to fail to realize their value, and to be ill fitted to act as a substitute for private initiative. Action was recommended for encouraging the rise of free local institutions affording agricultural credit which would stimulate farmers' initiative and realize the value of savings. The rural banks ought however, according to the opinion expressed in the resolutions of the congress, to intervene not only in direct credit business, but also when there was question of initiative for the improvement of the agricultural industry by the promotion of agricultural unions, and by contributing to the movement for accelerating the scientific subdivision of landed property and for the wider application of improved cultural methods.

Finally the theme was developed of legislative reforms which would concern agricultural co-operation. Under the name of co-operative societies Italian law regulates only societies having a variable capital, and hence grave practical difficulties arise in the matter of approving rules and applying various laws and also in connection with taxation. In a resolution proposed by Dr. F. Buffetti, general secretary of the Italian Federation of Rural Banks, the congress affirmed the necessity for a distinction between a company having a variable capital and a co-operative society, and recommended that the legal form of the latter be made to correspond to its economic significance. The congress declared what were, in its opinion, the characteristics of true co-operation. The business of an ordinary company is conducted by a group of capitalists who aim at the maximum profit, the business of a co-operative society by a group whose interest in the production differs from that of the capitalists, being the interest of labourers, consumers, persons needing credit, etc. Therefore in a co-operative society

capital is remunerated merely at the ordinary rate of interest, and any remaining net profit is distributed among the co-operators in proportion to their labour, consumption, recourse to credit, etc. Thus co-operation determines the profit accruing to capital on a basis of justice. Besides this distributive function co-operation also has a productive function, especially in the case of agriculture, inasmuch as the co-operative is economically the most convenient form of organizing the forces applied to the agricultural industry. Such was the conception of co-operation which the congress affirmed.

The personal character of the right to the vote and the membership, and the limitation of the dividend to the current rate of interest are, according to the dicta of the congress, those economic characteristics of a co-operative society which the legislature should translate into legal characteristics.

As regards the form which the liability of members should take, the congress advocated the introduction into Italian law of the society having declared liability and a capital constituted by guarantee shares.

Since the members are, by calling, neither merchants, manufacturers, nor bankers, the congerss considered it necessary for the co-operative societies to be assisted by the federations whose function must be safeguarded by making their inspection of the societies obligatory by law. The federations also do a work of propaganda and encouragement which comes within the social function of the State and should therefore receive State encouragement in the form of grants.

As regards taxation, the congress claimed no privilege for co-operative societies, but explicitly stated that they ought, like other forms of economic organization, to be able to live on their own resources. The congress asked only that they should be placed on an equality with other organs of national activity as regarded the incidence of taxes. It asked, that is, that small co-operative societies should be exempted from the taxes on business which would in their case be fatal to progress, and that there should be exemption from the tax on chattels in so far as net profits assigned to the reserve or paid to members were concerned, because the economic procedure of co-operative societies is such that these profits are not real profits, but represent a mere book-keeping expedient which facilitates the co-operative method of distribution.

In connection with this last subject of the discussions of the congress, it is opportune to note that Signor Ciuffelli, Minister of Industry, Trade and Labour, has recently nominated a commission charged to examine the various legislative enactments regarding co-operation and to propose measures for the systematic co-ordination of these enactments and for the reforms which the present development of the Italian co-operative movement have rendered necessary.

§ 2. The work and the development of the Italian Federation of Rural Banks.

The Italian Federation of Rural Banks, to whose initiative the congress of which we have spoken is due, represents the national organization of the 2,000 Catholic rural banks of Italy, and aims at a work of propaganda, guardianship and technical improvement. It arose in 1909, but its period of greatest and most fruitful activity dates from January 1915, a year since which its activity has been uninterrupted and constantly on the increase.

One of the first tasks it fulfilled was that of regrouping the banks in local federations, a matter judged indispensable to the regular development of the movement.

The 13 local federations which adhered to it at the end of 1914 had become 20 at the end of 1915, 29 at the end of 1916, 34 at the end of 1917, and 36 on 31 August 1918. Others are in course of formation.

In order to strengthen the organization of the local federations, the Italian Federation promoted their transformation into legally constituted societies and took opportune measures to ensure their having the staff they needed.

The federation is now carrying out a vast programme of economic and legislative reforms. On various occasions it valiantly upheld the cause of the banks before the fiscal and other public authorities, and it circulated important publications, among them a list of the Italian rural banks and a complete compilation of their statistics of finance, a work which is new in Italy.

It also conducted an active work of propaganda in favour of the national loans, and held a competition with prizes among the rural banks for the fifth loan, obtaining subscriptions for more than 42,000,000 liras.

By all this initiative the federation won the favour of the press and the support of government, which summoned it to take part in the work of special commissions and accorded it a money grant.

On 29 October 1917 it assumed the legal form of a limited liability co-operative society, having hitherto been active as a *de facto* society.

From its report on 1918 (January to August) it appears that in that year three new local federatons arose, those of Mantua, Pesaro and Crema, and the Federations of Florence, Bergamo, Ferrara and Amatrice were legally constituted.

In order to ensure the right working of the local federations, the Italian Federation received the staff intended for them in its offices for purposes of training. It appointed a group of inspectors, in order to facilitate revisory work, and it intensified its consultative work, receiving and despatching 1622 letters in eight months of 1918 or a monthly average of 200. It also improved the connection between the rural banks and the local banks by circulating a model agreement which covers the various forms of business as to which banks of these two kinds can, in their mutual interest, come to an agreement.

In conclusion we reproduce the following table which shows the position on 31 December 1917, from the book-keeping point of view, of the rural banks organized in local federations belonging to the Italian Federation. It should be noted that the number of federated banks is somewhat less than in the previous year because the banks of the federations in invaded territory (Treviso and Udine) are missing.

Since there are more than 2,000 Catholic rural banks in Italy, the table allows of the conclusion that about half the existing rural banks are grouped in local federations. By means of the intensive propaganda work of the Italian Federation this number will continually increase, and a wish formulated by the recent congress will thus be fulfilled.

Book-keeping Position of the Rural Banks

Order No.	Situation and name of Federation	No. of banks	No. of members	Balance sheet Total	Assets: Cash in hand	Loans to members	Cash in Bank	State securities	
1	Amatrice . . .	7	2.427	1,618,040.97	84,362.23	903,061.20	182,017.68	249,700.00	15,159.99
2	Aosta	8	407	567,498.39	6,907.00	159,988.43	189,749.42	207,698.52	20.00
3	Arezzo	15	1,859	1,654,997.25	73,186.99	739,549.20	446,450.84	168,916.38	1,470.40
4	Asti	8	849	1,922,402.27	54,067.85	507,546.75	896,537.87	338,059.23	500.00
5	Benevento . .	10	1,417	1,177,055.78	81,428.87	865,744.76	342,232.30	260,940.62	960.55
6	Bergamo . . .	70	7,123	11,162,847.28	106,707.42	1,570,638.40	3,342,143 65	244,009.04	555,196.05
7	Bologna . . .	87	7,468	6,801,204.05	139,107.88	1,296,054.71	3,678,495.50	—	1,297,403.75
8	Brescia	27	3,383	7,538,567.49	201,270.71	2,858,157.38	1,404,266.19	1,554,077 86	47,182.00
9	Caltanissetta .	21	7,603	1,558,417.87	417,768.38	4,114,055.20	3,149,361.40	3,035,287.86	22,124 40
10	Cosenza . . .	47	2,494	12,434,658.97	719,687.00	5,144,897.19	3,743,542 71	354,183.13	12,231.00
11	Crema	14	1.877	—	—	492,260 44	164,505.32	—	—
12	Faenza. . . .	56	5,691	17,691,969.69	272,055.39	2,804,893.88	3,191,943.20	1,165,554.30	126,506.03
13	Fano	10	1,683	294,326.60	—	239,652.88	17,836.90	—	—
14	Fermo	19	2,384	3,370,193 99	116,158.79	2,414,215.09	438,714.53	314,912.88	1,504.90
15	Ferrara . . .	36	3,738	2,851,223.39	52,258.67	727,546.36	1,806,660.20	149,470 26	—
16	Florence . . .	27	3,884	2,343,447.52	166,538.70	859,013.09	929,307.82	263,782 26	3,586.20
17	Forlì	33	3,465	2,006,718 48	91,775.22	932,478.56	915,371.39	45,280 40	3,483.92
18	Lodi (1) . . .	12	1,512	1,002,346 52	27,294.25	397,116.01	463,719 43	107,588.70	—
19	Mantua. . . .	10	911	1,553,770.01	63,501.03	47,407.75	417,895.67	112,875 10	—
20	Milan (2) . . .	18	2,024	—	—	469,283.01	522,894.63	—	—
21	Mondovì . . .	18	1,857	2,609,605 06	52,790.84	1,006,250.56	1,104,134.24	425,504.88	2,100.00
22	Palermo . . .	13	2,895	5,921,109.61	164,481.32	1,898,673.15	629,401 66	341,541.70	10,048.00
23	Parma	45	3,651	7,540,575.48	301,677.80	2.777,115 20	2,955,507 89	1,357,727.15	24,888.26
24	Pesaro (3). . .	—	—	—	—	—	—	—	—
25	Pistoia	40	4,627	3,748,994.40	68,511.87	2,780,718.26	1,005,567.25	629,200.00	26,800.42
26	Reggio Calab. .	14	816	924,820.99	33,935.80	321,967.21	429,434.42	117,670 00	43.95
27	Reggio Emilia .	20	2,363	4,283,627.31	103,224.61	1,534,457.72	879,367.03	1,388,359 80	—
28	Rome.	53	12,066	9,253,285.48	554,550.10	3,268,760.96	4,055,669 33	733,416 41	76,596.27
29	Rovigo	56	4,123	3,302,865.64	129,531.32	1,433,809.53	1,215,213 18	8,280 92	110,961.02
30	Ripatransone .	6	1,566	1,085,143.63	33,664.58	642,802.50	306,079.84	58,985.57	38,952.97
31	Salerno	23	1.508	1,674,983.00	118,842.44	873,336.21	591,536 50	26,352 00	1,613.00
32	Senigallia . .	10	1,176	1,656,711.56	13,539.49	442,057.47	358,645 84	8,442 50	5,650.05
33	Turin.	48	4,128	21,555,129.07	403,072 07	3,414,237.39	8,972,759 80	5,086 937.13	562,029.30
34	Treviso. . . .	—	—	—	—	—	—	—	—
35	Udine	—	—	—	—	—	—	—	—
36	Isolated banks	41	7,764	7,572,636.65	364,417.44	3,280,532.92	2,305,544.22	1,497,361 83	13,061.00
	Total. . .	922	110,642	128,679,174.40	4,986,326.66	51,218,279 37	50,752,507.75	20,252,716 45	2,960,073.43

(1) The data with regard to this federation refer to 31 December 1916 for it sent no data as to 1917. and 1917. — (3) This federation, which was constituted recently, has not yet constituted its statistical

which had been organized on 31 December 1917.

Stock in hand	Various assets	Net losses of the year	Passività				
			Members shares & reserve	Deposit accounts	Liabilities on bills, on current accounts and on rediscounts	Various liabilities	Net profits of year
70,719.52	57,040.59	—	58,723 98	1,478,660.97	7,056.10	9,643.10	7,977.06
—	1,082.47	37.06	6,308.27	546,628.19	—	588.87	608.04
76,361 90	149,061.54	—	22,368.65	1,527,604.70	74,300.00	22.258.62	6,465.28
100.00	125,570.57	—	14,681.08	1,596,404.59	—	10,341.86	2,569.31
2,454.70	123,173.92	615.06	26,736.44	1,569,324.91	27,925.14	60,316.25	2,823.74
424,356.99	187,798.59	10,198.06	179,499.49	6111,816.18	70,713.85	326,096.49	25,405.99
—	170,433.54	1,309.38	170,745.78	6,353,327.68	7,694.01	25,253.37	25,783.92
56,067.31	517,937.48	428.51	151,070.48	6,380,291.36	96,234.33	56,670.43	39,264.62
20,100.01	734,422.75	65,297.87	253,576.45	10,949,553.33	172,241.63	149,712.87	33,233.59
68,824.13	267,247.77	2,399.88	123,527.82	9,420,270.80	115,009.50	1,065.46	320,096.51
—	193,438.97	—	54,584.40	717,274.49	—	147,075.74	—
54,450.41	348,958.95	1,784.32	187,161.86	6,711,870.01	158,672.50	48,069.34	36,989.49
—	20,641.30	—	8,248.05	434,619.06	—	—	—
542.50	74,137.90	7.10	132,329.50	3,176,822.72	14,000 00	29,077.55	17,894.22
—	114,537.80	750.00	82,528 81	627,283.59	111,396.79	16,540.37	13,473.37
1,300.00	118,795.25	1,124.20	46,066.24	2,186,835.05	11,371.85	90,232.14	8,942.24
—	17,055.19	1,273.80	67,525.00	1,872.578.40	—	57,008.17	9,016.91
—	6,728.13	—	17,144.77	980,015.95	—	942.09	—
—	912,090.46	—	21,155.63	1,292,956.55	—	237,419.72	—
—	307,941.03	—	49,049.40	1,687,650.05	—	33,766.38	—
22,172.56	47,863.95	651.86	33,838.90	2,490,226.64	43,825.02	8,992.12	4,183 12
11,358.85	157,147.10	2,700.00	275,064.74	3,683,421.04	9,717.39	20,237.22	17.751.46
18,598.93	102,341.75	2,728.50	239,981.86	6,741,018.98	51,433.18	14,467.35	26,511.11
—	—	—	—	—	—	—	—
10,398.00	85,141.51	—	93,868.44	3,468.477.85	183,869.51	—	9,724.73
—	11,145.33	729.81	10,754.49	910,739.93	—	4,477.47	3,919.70
—	378,218.15	—	111,318.54	3,527,474.79	270,798.73	371,501.08	12,534.17
270,159.35	637,672.30	24,722.87	458,439.98	7,462,392.49	960,100.67	130,179.58	102,975.91
36,025.63	263,277.50	28,051.19	109,414.09	2,503 740.81	578,181.57	147,974.17	5,254.34
1,276.50	2,340.71	1,089.92	30,569.24	941,966.55	5,360.81	1,657.51	5,629.02
—	105,502.90	1,124.13	49,051.15	1,019,496.03	232,164.60	63,522.93	17,382.46
—	5,726.22	708.63	5,835.06	809,452.55	0.82	59,461.12	2,841.84
70,100.75	318,986.23	15.139.03	277,957.50	22,000,047.51	190.52	341,293.13	325,771.04
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
199,137.29	323,572.28	1,954.53	213,584.56	68,900,380.52	59,721.85	186,908.62	25,748.35
1,414,505.33	6,794,030.03	164,955.56	3,581,810.65	128,060,623.20	3,669,980.37	2,625,291.12	1,109,878.99

— (a) The data with regard to this federation refer to 31 December 1915 for it sent no data as to 1916 department.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH COLONIES

MAURITIUS

THE WORKING OF CO-OPERATIVE CREDIT SOCIETIES FROM 1 JULY 1917 TO 30 JUNE 1918 — From the official report for that year

The working of the co-operative credit societies from 1 July 1917 to 30 June 1917 may on the whole be considered satisfactory. These organizations now have a firmly established position.

The following table shows the changes which have taken place in the position of circulating funds since 1914.

Year	Number of Societies	Share Capital	Deposits of members	Deposits of non-members	Government Loans	Reserve Funds
		Rs	Rs.	Rs	Rs	Rs
1914	15	52,721	6,067	23,302	37,550	2,312
1915	20	87,028	37,220	22,662	35,550	6,898
1916	23	106,143	41,707	20,814	41,180	15,037
1917	23	116,307	33,440	41,202	40,675	27,918
1918	23	121,270	35,735	31,225	37,370	44,589

As these figures show, the number of the societies has not changed since 1916. The total number of shareholders has undergone in the whole period a slight diminution, falling to 2,767 or an average of 120 a society. The number of members taking loans in 1917-18 was 1,708 or 61.8 per cent. of the total membership and an average of 72 per society. The number in arrears with their payments on 30 June 1918 was 141, or an average of 6.1 per society, 5.1 per cent. of the total membership and 8.3 per cent. of the number taking loans.

The loans due on 30 June 1918 amounted to Rs. 270,541, having increased by more than Rs. 16,000 since the previous year. Of the total sum, overdue loans constituted 6 per cent., more than half of them being in respect of two societies.

Practically all the loans were for productive purposes; there was a complete absence of loans for such purposes as marriages and funerals.

The average amount of a loans was Rs. 157.

Three societies had been working five years since the date of their registration and were entitled in consequence to declare a dividend. Two of them resolved to abrogate a dividend for one year more, in order further to improve the position of their reserve funds, while the third declared a dividend of 7 per cent.

CANADA.

CO OPERATIVE LIVE-STOCK MARKETING IN SASKATCHEWAN —*The Public Service Monthly* Vol VII, No 7, Regina, February 1919

In our issue of May, 1918, we described the organization and methods of working of the co-operative live-stock marketing associations in Saskatchewan We now give some figures showing the growth of these associations since they first began to be formed in 1914.

The following table shows the number of associations in each year, the number of cars of live-stock despatched and the total value of the live-stock sold

Year	Number of Associations Marketing Live-stock	Live Stock	
		Number of Cars	dols
1914. . .	9	30	42,034
1915.	10	140	150,512
1916.	23	241	323,171
1917. .	35	548	1,050,285
1918 . .	50	750	1,432,000

The figures for 1918 are partly estimated, as the complete returns for the year were not to hand when the table was compiled.

Besides the above associations, which are all registered, the unincorporated local branches of the Saskatchewan Grain Growers' Association also carry on to some extent the co-operative marketing of live-stock, but no figures are available as to the amount of business done.

An endeavour was made to ascertain the financial benefit which was obtained through co-operative marketing and to that end a special report was requested from each association in 1917. The following table summarises the reports from eleven associations which were able to give full particulars regarding their work:

Abbreviated ...ation	Number of Cars	Number of Shippers	Saving (cents per lb.)	Weight lbs.	Amount saved dols.
Alba	1	12	1 1/2	9,970	149
Bangor	2	10	1/2	35,780	178
Birch Hills	27	98	2	595, 64	11,911
Dubuc .	11	36	5 8	2 2, ,10	1,153
Guernsey .	3	37	2 5	56,660	233
Melfort . .	20	106	1/2	147,100	2,235
Mellington	6	46	1	68,670	686
Naseby	1	11	2	27,060	541
Parkside	12	82	3/4	219,015	1 643
Rozilee	6	449	5 8	630,530	,940
Turtleford	65	175	1	1,173,390	11,733
Wauchope . .	2	4	1	26,060	260
Welwyn .	7		1	121,430	1,214
...tal	191			3,663,739	36,382

The results obtained by these eleven associations vary very considerably, but taking the average a net saving of one cent per pound has been realised by marketing co-operatively.

REGENCY OF TUNIS

1. AGRICULTURAL MUTUAL CREDIT FROM 1912 TO 1917. — *Statistique générale de la Tunisie, Année 1917*. Tunis, 1918.

The Tunisian co-operative banks of agricultural credit are of two kinds, those formed among Frenchmen and those formed among natives. Their number and membership from 1912 to 1917 are shown in the following table:

Year	French banks		Native banks	
	Number of banks	Membership	Number of banks	Membership
1912 .	20	524	1	108
1913	24	556	27	849
1914	24	565	41	1 483
1915	24	548	40	1,470
1916	24	536	40	1,464
1917	24	517	38	1,129

This table shows a slight retrogression, evidently due to the state of war The influence of the world crisis on discount operations is still more evident, as appears from the following figures

Year	Bills discounted	Amount in francs
1912	1,853	2 [illegible]02,909 10
1913	4,131	5,141,876.90
1914	4,119	4,[illegible]28,235.29
1915	368	1,427,997 65
1916	81	186,916 35
1917	256	328 950 00

The recovery which can be noticed in 1917 allows of the hope that when normal conditions of life are once more established these agricultural mutual credit banks will receive a new impulse

2 THE AGRICULTURISTS CENTRAL CO OPERATIVE SOCIETY FROM 1 1 TO 191[illegible] — *Statistique générale de la Tunisie Année 1)* Tunis, 1 1

The influence of the war on the development of the agriculturists' central co-operative society has been felt in two very different ways on the one hand the number of the shares subscribed has considerably diminished, on the other hand the sums involved in transactions have much increased These two facts, which need no comment, are illustrated by the two followig tables,

TABLE I *Number of shares subscribed*

Year	Number of 50 franc shares	Amount in francs
1912 .	350	17,550
1913	945	47,250
1914 .	240	12,000
1915 .	5	250
1916 .	6	300
1917	8	400
	1 554	77,750

TABLE II. — *Sums involved in transactions.*

Year	Commercial transactions — Value of goods delivered (francs)	Various loans — Loans of seed	Loans of labour	Loans of spring work	Harvest loans	Loans of manure	Total amount of loans	Outstanding loans
1912 . . .	853,431.15	—	—	—	—	—	—	—
1913 . .	793,294 05	—	—	—	—	—	—	—
1914 . . .	408,012 85	880,558.10	332,794 45	—	—	—	1,213,382.55	—
1915 . . .	472,348 65	81,451.45	166,035.85	112,275 00	275,512.60	—	635,274.90	27,740 45
1916 . . .	1,020,837 20	1,024,508 60	408,430.75	106,217.40	202,434.70	—	1,741,591 45	16,287.75
1917 . . .	847,599 15	968,488.60	177,001.30	128,207.00	350,454.00	109,291 55	1,733,442 45	3 175,05
Total . .	5,395,523 05	2,955,036.75	1,084,262 35	246,699 40	828,401.30	109,291 55	5,323,691.35	47,203 25

It is seen that while before the war this co-operative society undertook only commercial transactions, it has been led since 1914 to make loans of considerable importance. This initiative has been largely justified by its success: out of the total amount lent, 5,323,691.35 francs, only 47,203.25 francs have still to be rapaid.

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3. THE NATIVE THRIFT SOCIETIES IN 1917 (1) — *Compte rendu des opérations des Sociétés indigènes de prévoyance en 1917* (*Journal officiel Tunisien* 5 February 1919)

Financial Position. — The receipts of the native thrift societies which swelled their assets amounted in 1917 to the following sums:

(1) Recoveries on credits, of former societies	4,937.20	francs
(2) Recoveries on centimes additional to the *medjba* tax	2,718 76	»
(3) Quota due to the native thrift societies of recoveries on temporary subscriptions .	162,785 30	»
(4) Centimes additional to the *canoun* tax on olive and date-trees:		
(*a*) Years before 1910. . 1,083.54 francs	152,022.82	»
(*b*) 1910 and later years. 150,939.28 »		
(5) Centimes additional to the *achour* tax:		
(*a*) Years before 1910 . . 1,269.71 francs	211,786.97	
(*b*) 1910 and later years. 210,517.26 »		
(6) Centimes additional to the Djerba land tax	9,331.11	»
(7) Additional *medjas* centimes.	3,751.28	»

(1) For the activity of these societies in 1916 see our issue for March 1918, page 210.

(8) Recoveries on costs of management and commission :		
(*a*) on loans of seeds . 18,776.42 francs		
(*b*) on mortgage loans 198,109.06 »	208,920.57	francs
(*c*) on advances to branches . . . . . 2,035.09 »		
(9) Recovery of donations and legacies . .	2,600.00	»
(10) State advance deducted from payment annually due by the *Banque de l'Algérie*	174,283.37	»
Total . . .	943,137.38	»

Independently of the receipts increasing assets 3,434,711.79 francs of the amount of loans were recovered in 1917. This sum was made up as follows :

(1) Loans of seed 1908-1909	8,423.56	francs
(2) » » » 1909-1910	4,469.50	»
(3) » » » 1910-1911	19,165.82	»
(4) » » » 1912-1913	227,130.28	»
(5) » » » 1913-1914	80,464.10	»
(6) » » » 1914-1915	1,154,999.29	»
(7) » » » 1915-1916	605,402,08	»
(8) » » » 1916-1917	191,652.55	
(9) Loans of maintenance 1908-1909	1,321.61	
(10) » » » 1910-1911	156.88	
(11) » » » 1912-1913	33,210.05	
(12) » » » 1913-1914	3,845.55	
(13) » » » 1914-1915	879,497.09	
(14) » » » 1915-1916	10,953.63	
(15) Mortgage loans	182,539.45	
(16) Advances to branches of the societies . . .	28,480.36	
Total . . .	3,484,711.79	»
Carried over from recoveries increasing assets of the societies	943,137.38	»
Grand total of recoveries in 1917 . . .	4,377,849.17	»

The sum of 4,377,849.17 francs to which the receipts of native thrift societies amounted in 1917 represents the highest level they have reached since the societies were instituted. This success is due to a satisfactory economic situation, and to the zeal of collectors who thus justified the commission allowed to them since 1916 on their recoveries of loans of seed and maintenance.

Loans granted. — Since the 1916 harvest was, generally speaking, good, applications for loans were not numerous in 1917. The societies

distributed in the form of loans of seed only, 1,983.48 quintals of wheat, 3,540.56 quintals of barley, 4,397.28 quintals of potatoes, 101 quintals of chick peas, 100 quintals of broad beans and 5 459.50 quintals of superphosphates, and as loans of maintenance 4,873.60 quintals of barley, the value of all these loans being 705,650.66 francs.

They also advanced to various co-operative societies founded under their auspices a total sum of 50,130.60 francs, namely 20,410 francs to the Co-operative Society of the Horticulturists of Gabes, 2,677.80 francs to the Co-operative Society of the Weavers of Djerba, 7,042.80 francs to the Co-operative Society of the Potters of Djerba, and 20,000 francs to the Woolmakers' Co-operative Society of Tunis.

Finally they spent 9,755.20 francs on making former mortgage loans regular.

Assets of the Societies on 31 December 1917. — From the receipts swelling the assets which amounted to . . . . . 943,137.38 francs
we must deduct . . . . . 122.70 »

representing loans of maintenance forming bad debts. The net sum of these receipts is therefore . . . . . 943,014.68 » 943,014.68 francs
to which must be added the amount of the assets of the societies as shown by the report of the previous years, namely . . . . . 5,816,613.01 »

The total on 31 December 1917 was therefore 6,659,627.69 »

These assets were made up as follows:

(1)	Cash in hand	3,577,207.43	»
(2)	Still to be recovered of seed in 1908-09. . .	38,123.70	»
(3)	» » » » » » » 1909-10. . .	19,961.71	»
(4)	» » » » » » » 1910-11. . .	57,807.07	»
(5)	» » » » » » » 1912-13. . .	121,333.35	»
(6)	» » » » » » » 1913-14. . .	55,712,52	»
(7)	» » » » » » » 1914-15. . .	786,999.98	»
(8)	» » » » » » » 1915-16. . .	422,450.66	»
(9)	» » » » » » » 1916-17. . .	36,214.49	»
(10)	Loans of maintenance in 1912-1913.	23,728.03	»
(11)	» » » » 1913-1914.	14,351.50	»
(12)	» » » » 1916-1917.	204,934.12	»
(13)	Mortgage loans	1,440,736.94	»
(14)	Advances to co-operative societies.	63,953.38	»
	Total . . .	6,863,515.08	

whence must be deducted the recoveries of the loans of maintenance of 1909, 1911 and 1914, not yet repaid to the State which advanced them	103,887.39	francs
Remainder	6,759,627.69	»
of this sum	1,393,946.06	»
represent advances by the State, so that the net assets amount to	5,365,681.63	

The native thrift societies possess a capital which now considerably exceeds seven million francs and of which the larger part is entirely at their disposal, and they can therefore give precious assistance to the government in any undertaking which tends to improve the agricultural and industrial production of the native population and their wellbeing. It is worthy of note that in this sphere a return, with a reduction of rates, is contemplated to the mortgage loans which have already rendered such great service to landowners exhausted by usury, and also to the insurance by the societies, on the payment of a small additional subscription, of their members' risks of hail, fire, death, etc., and the placing at the disposal of members, on profitable terms as regards prices and credit, of the raw and other material necessary to the improvement of their agriculture and industry.

UNITED STATES.

AGRICULTURAL CO-OPERATION IN NEBRASKA. — *The Grain Grower's Guide*, Winnipeg (Manitoba, Canada), 19 February, 1919.

Under the auspices of the Farmers' Educational and Co-operative State Union of Nebraska, a large number of co-operative business enterprises have sprung up in that State. These include farmers' elevators, live-stock shipping associations, buying associations, mills, creameries, etc., and the Farmer's Union State Exchange, a large supply house in Omaha, doing both a wholesale and a mail order business. As each local association is completely independent and makes no reports to the State organization, it is impossible to estimate the total volume of business done, but the aggregate must be very large.

Farmers' Elevators. — Prior to the organization of the Farmers' Union there were farmers' elevators in Nebraska, but the Union gave a great impetus to their formation. There are now about 125 farmers' elevators

which have been organized as a result of Farmers' Union propaganda, and of which the stockholders are members of the Union.

The paid-up capital of these elevator companies varies from 10,000 to 75,000 dollars Interest on the stock is limited, usually to eight per cent. After payment of interest on stock and setting aside something to reserve, the balance of the profits is distributed as patronage dividends. Some of the companies pay patronage dividends to stockholders only, but others pay them to all patrons who are members of the Farmers' Union.

Besides dealing in grain most of the elevator companies sell coal, and many of them handle lumber and implements. With few exceptions they also ship live-stock. One company, at Memphis, Nebraska, did a business amounting to 700,000 dollars in 1917, paid 8 per cent. interest on the stock, set aside 13,000 dollars for the reserve fund, and distributed a patronage dividend of 8 cents a bushel on the grain purchased. Another company, at North Bend, Nebraska, did a business of 706,024 dollars in 1917 and paid a patronage dividend of 2 ½ per cent. on the purchases and sales.

Nor is the benefit which these companies confer on their patrons confined to the dividend. They usually increase the local market prices of grain by three to five cents a bushel as compared with places where no co-operative competition exists.

Co-operative Flour Mills. — Two companies organized by the Farmers' Union operate flour mills, one at Scribner and the other at Snyder They distribute their products widely to associations and stores formed by the Union throughout the State. Only the stockholders share in the profits of these mills, but under normal conditions, when the government was not regulating prices, they had the effect of steadying the price of flour

Live-stock Shipping. — Many of the elevator companies, as has been said, ship live stock. Some of them buy hogs outright; others simply ship the animals for members, making a specific charge for the work. The latter plan is almost always followed in the case of cattle. Where there is no elevator company, or where the company does not ship live stock, members of the Farmer's Union usually form a live stock association.

In April 1917 the board of directors of the State Union established a Live Stock Commission at the Omaha stock-yards. Branches were subsequently established at St. Joseph (Missouri), Sioux City (Iowa) and Kansas City (Missouri) to serve Nebraska members who ship to those markets, as well as Farmer's Union members in the adjacent States. All of the profits are returned to the members who ship to any branch of the commission, in proportion to the commission paid At the Omaha branch, 38 per cent. of the commissions paid in the first year's was returned to the shippers; at St. Joseph, 25 per cent.

The growth of the Live Stock Commission has been rapid. In the first six months of its existence it received 679 carloads of live stock and showed a profit of 2,113 dollars; in the first six months of the second year, it received 2,506 carloads and showed a profit of 18,223 dollars.

Creameries. — Nebraska is not primarily a dairy state, and because of the scattered nature of the dairy industry local creameries have not

prospered. Great centralizing creameries occupied the field and had a virtual monopoly up to 1916, when the Farmers' Union Co-operative Creamery was opened at Fremont.

This company has about 2,200 stockholders, distributed over a wide area. Cream is received from a large territory, some of it coming more than 300 miles. In 1917 the creamery made 816,998 pounds of butter. This is not a large percentage of the total butter output of the State, but it was sufficient to furnish an element of competition which kept up the price of butter-fat.

Another company was formed to operate a smaller creamery at Riverton, but the plant was burnt down in the spring of 1918 and the company is building a new plant at Superior. The organization of creameries was not pushed forward during the war, but others are contemplated.

The Farmers' Union State Exchange. — The difficulty experienced by the local associations and the local branches of the Farmers' Union in buying outside the regular channels, led to the organization in 1914 of the Farmers' Union State Exchange. All the stock of this company is held in trust by the directors of the Union; it is the property, therefore, of all the members of the Union, as also is the Live Stock Commission.

The goods handled by the Exchange include a great variety of agricultural requisites, which are sold to the companies and associations organized by the Farmers' Union, to local branches and to individual members. It also sells farm produce consigned to it by members.

The Exchange is operated as nearly as possible without profit. In 1917 the business done amounted to 1,787,700 dollars, and the expenses to 59,777 dollars, the net profit being only 1.72 per cent. The business was considerably increased in 1918.

One of the largest items in the sales made by the Exchange is binder twine. For the 1918 harvest, between four million and five million pounds of twine were sold. The average saving to members was about three cents a pound.

The produce department handled a large volume of potatoes in 1918. Up to October 29th, over 200 car-loads had been sold. Most of these were shipped by the Potato Growers' Association of Sheridan County, a local independent company organized to handle the potato crop for local growers. The Exchange sells the potatoes on a commission of five cents a hundredweight.

Local Co-operative Buying. — Local co-operative buying in Nebraska takes a number of forms. The earliest form was the pooling of orders for goods in local branches of the Farmers' Union. Another method of buying is through centres formed by several local branches. Little or no capital is required for this kind of buying as no stock of goods is carried.

Where an elevator company exists, the bulkier supplies are usually purchased through it. Often the practice is followed of delivering as much as possible from cars, but some companies keep goods in stock. Where buying becomes extensive a separate company is usually formed to deal with it.

During 1918 there was a great increase in the number of co-operative stores organized by the Farmers' Union Altogether there are about 427 incorporated local buying agencies in Nebraska, including the elevator companies which sell merchandise, Of this number about 160 are regular co-operative stores, carrying a full stock of groceries and sometimes dry goods and clothing as well So far these buying agencies have not been co-ordinated or federated. Each buys where the manager thinks he can do so most advantageously. Some buy largely from the State Exchange, while others buy very little from it.

Part II: Insurance and Thrift

HOLLAND.

INSURANCE AGAINST LOSSES BY HAIL

by H. R. M. LEOPOLD.

SOURCES

BIJLAGEN BEHOORENDE BIJ DE RAPPORTEN EN VOORSTELLEN BETREFFENDE DEN OECONOMISCHEN TOESTAND DER LANDBOUWERS IN NEDERLAND (*Appendices to the Reports and Proposals as to the Economic Position of Agriculturists in Holland*). Publication of the State Agricultural Commission 1906. The Hague, 1916

DE NEDERLANDSCHE LANDBOUW IN HET TIJDVAK 1813-1913 (*Dutch Agriculture from 1813 to 1913*). Publication of the Direction of Agriculture. The Hague, undated (1914), pp. 224 et seq

VERSLAGEN EN MEDEDEELINGEN VAN DE DIRECTIE VAN DEN LANDBOUW (*Reports and Communications of the Direction of Agriculture*) Publication of the Ministry of Agriculture, 1916 No. 3; 1917, No. 3; 1918, No. 3

Insurance against hail is much less widely practised among Dutch peasants than insurance against fire. The phenomenon is explicable only as a consequence of conservatism. Its contrary would indeed seem natural. For while persons who suffer loss owing to fires in their houses or outbuildings are comparatively few, it is rare to find an old peasant who cannot tell of crops of his which have been destroyed by hail.

Although dangerous hailstorms are not very frequent in Holland -- the comparatively low figures which stand for the benefits paid by the insurance companies prove this fact — extensive stretches of country nevertheless sometimes suffer serious damage. In 1891, for example, Brabant and Limbourg lost 3,000,000 francs in a single day. On this occasion, since insurance against hail had barely arisen and was therefore absolutely inadequate, the government of these provinces could not do otherwise than allow the local authorities to draw on public charity for the sums necessary to cover the losses.

The other provinces followed this example, with the really miserable result that 300,000 francs were collected, or 10 per cent. of the losses.

Nor did insurance against hail develop otherwise than slowly after 1891, and for some years it has been stationary. Its history is not however

devoid of interest for from the beginning it has been dominated by the mutual principle. The first companies undertaking insurance of this kind, of which notices are found between 1850 and 1860, were co-operative and those now existing are mutual societies. The first of the latter was founded in Oostburg (Zealand) in 1885 and reorganized in 1908. We will therefore deal with it after the others which have older rules.

The *Algemeene Nederlandsche Onderlinge Hagelverzekering-Maatschappij* (General Dutch Mutual Society of Insurance against Hail) of Dordrecht, which was founded in 1893, has a somewhat complicated tariff for various crops, going from 0.50 florins a year for grass, clover and the like, to 2.50 florins for fruit, the rate being always per 100 florins of insured value. A loss of less than 5 per cent. of the real value of a crop is not repaid. In such a case the peasant pays expenses of valuation amounting to a minimum of 25 florins. The following table shows the development from 1894 to 1911:

Development of the "Algemeene Nederlandsche onderlinge Hagelverzekering-Maatschappij".

Year	No. of the insured	Insured value	No. of cases of loss	Amount of damages	Reserve fund
		florins		florins	florins
1894	41	120,039	1	144.00	104.63
1895	272	679,895	13	3,337.47	104.63
1896	329	858,358	3	1,547.20	500.00
1897	346	831,629	13	3,809.37	515.00
1898	405	945,217	6	703.62	1,030.00
1899	525	909,321	9	1,567.25	1,060.00
1900	677	1,060,357	48	7,069.05	1,097.23
1901	838	1,094,958	3	1,280.54	5,032.43
1902	956	1,198,577	28	5,896.13	6,000.73
1903	1,003	1,342,864	9	622.87	12,000.00
1904	969	1,262,905	5	642.00	17,000.00
1905	980	1,299,276	47	10,248.95	15,115.36
1906	1,078	1,433,454	37	8,688.00	15,509.55
1907	1,462	1,737,349	28	4,201.85	20,016.89
1908	1,892	2,164,096	140	25,366.36	8,300.00
1909	2,490	2,666,299	63	3,704.58	19,000.00
1910	3,207	3,136,492	218	18,262.73	18,000.00
1911	5,006	4,263,438	80	9,369.63	38,000.00
			756	106,461.60	

The last statistics published as to this society, which is by far the most important in Holland, give the area it insured as 21,404 hectares in 1911, 21,000 in 1915 and 21,473 in 1916; while the number of the insured increased from 5006 in 1911 to 6919 in 1915 and 7325 in 1916 (1), and the insured value was 4,623,438 florins in 1911, 6,556,689 florins in 1915, and 8,585,291 florins in 1916.

The *Noordbrabantsche Christelijke Boerenbond* (Catholic Peasants' League of North Brabant) founded a mutual society insuring against hail at Boxtel in 1902. It insures only grain, in return for a single premium of 0.50 florin per 100 florins of insured value. Losses in excess of the available capital are distributed in proportion to the amount of premiums. We reproduce some data as to the society's development:

Year	Insured capital	Premiums	Benefits
	florins	florins	florins
1902	187,677	938.38	—
1903	222,906	1,114.53	-
1904	273,550	1,367.75	—
1905	334,460	1,672.30	197.50
1906	466,604	2,333 02	199.88
1907	612,230	3,061.15	6,111.17
1908	1,354,560	6,797.28	5,685.70
1909	1,975,094	9,875.47	158.07
1910	2,270,778	11,353.89	16,871.67
1911	2,596,960	12,984.80	3.225.80
		51,478.57	34,439.80

The last statistics give only the number of the insured hectares, namely 11,000 in 1911, 13,000 in 1915 and 14,000 in 1916, and the insured value which was 2,799,928 florins in 1915, 2,906,202 florins in 1916 and 3,109,330 florins in 1917 (2).

The *Limburgsche Landbouwbond* (Agricultural League of Limbourg) also founded, in 1899, a society insuring against hail. This was reorganized in 1906 and has its offices at Roermond. Its premiums vary from 0.70 florin to 1.20 florins per 100 florins of insured value. In

(1) A curious phenomenon is seen here. While the insured area hardly changed and the number of the insured increased only by 30 per cent., the insured value more than doubled, without doubt in consequence of the enormous rise in the price of foodstuffs.

(2) Limbourg has much land which does not need chemical manures; hence there was here a very considerable rise in the insured value.

exceptional cases the capital may be increased by a personal contribution up 0.35 florin per 100 florins. Before 1912 no special data were published The membership was 3290 in 1912, 3371 in 1915, 3587 in 1916 and 3732 in 1917; the number of hectares insured was 11,759 in 1912, 12,000 in 1915, 10,000 in 1916 and 12,294 in 1917; the insured value 1,973,810 florins in 1912, 2,319,849 florins in 1915, 2,506,298 florins in 1916 and 3,688,369 florins in 1917 (1).

The *Cöoperatieve Vereeniging tot Verzekering tegen Hagelschade* (Mutual Hail Insurance Society) of Oostburg in Zealand has a different character, Founded in 1885, its rules were recast in 1908. The members pay an admission fee of 2.50 florins per hectare of cultivated land; the premium is fixed annually, its maximum being 0.75 florin a hectare. Losses of less than 10 per cent. of the insured value are not repaid. No more than seven eighths of the capital can ever be paid out. In case of greater losses, an individual contribution can be levied, but must not exceed 2.50 florins per insured hectare.

The Mutual Hail Society of Goes (Zealand), *De Zuid-Bevelandsche Onderlinge Verzekeringsmaatschappij tegen Hagelschade*, is smaller than that of Oostburg and has almost identical rules. The insured person pays half the expenses of valuation when the loss is less than 10 per cent. The following table gives some data as to the working of this society.

Year	Membership	Insured area	Premiums	Admission fees of members	Benefits
		hectares	florins	florins	florins
1907 .	31	1,445.0136	376.73	163,97	—
1908 . . .	32	1,476.7973	385.16	—	—
1909	33	1,759.1055	455.75	1,101.63	554 99
1910 . . .	41	2,019 3901	525.30	1,129.70	—
1911	43	2,018.5715	525.58	37.89	1,192.69

The membership was 49 in 1915, 49 in 1916 and 61 in 1917; the number of insured hectares 2170 in 1915, 2069 in 1916 and 2320 in 1917; the insured value 434,000 florins in 1915, 413,800 florins in 1916 and 986,388 florins in 1917.

The Hulst (Zealand) Mutual Society (*Onderlinge Verzekerings Maatschappij tegen Hagelschade*), founded in 1891 and reorganized in 1900,

(1) In the case of this society no large increase in the insured value is found, probably because the land of Brabant, being much less fertile, has suffered much more from the absolute lack of chemical manures than the north and south west of the country where there are deep strata of very fertile clay

has a premiums tariff going from 0.20 per cent. of value (potatoes and the like) to 0.45 per cent. (onions, flax, etc.); losses of less than 10 per cent. are not repaid; special contributions are never needed. The membership was 423 in 1902, 476 in 1911, 499 in 1915, 504 in 1916 and 515 in 1917; the number of insured hectares was, in these years, 7686, 8407, 9112, 9174, 9212; and the insured value was 1,681,400 florins in 1911, 2,606,000 florins in 1915, 3,778,000 florins in 1916, and 3,934,400 florins in 1917.

We will now pass from the south to the north of the country. In Groningen a mutual hail society (*Onderlinge Hagelverzekering-Maatschappij*) was founded at Loppersum in 1889. It levies an annual premium of 0.10 per cent. of value, 0.30 per cent. in the case of flax. When heavy losses occur recourse can be had to special contributions, which have not however ever been needed. Losses of less than 8 per cent. are not repaid, and no more than 400 florins a hectare is repaid in any case. The membership was 200 in 1912, 210 in 1915, 206 in 1916 and 215 in 1917; the number of insured hectares was 6409 in 1912, 6567 in 1915, 6567 in 1916 and 6805 in 1917; the insured value was 1,477,878 florins in 1912, 1,686,956 florins in 1915, 2,240,885 florins in 1916 and 2,817,735 florins in 1917.

The rules of the mutual hail society of Eenrum (Groningen) (*Onderlinge Hagelverzekering Maatschappij*), founded in 1898, are identical with those of the Loppersum society with which it is connected by a contract of mutual liability. The membership was 162 in 1912, 180 in 1915, 204 in 1916, 215 in 1917; the number of insured hectares 6409 in 1912, 6567 in 1915, 6567 in 1916, 6805 in 1917; the insured value 1,908,610 florins in 1912, 1,239,830 florins in 1915, 1,769,670 florins in 1916 and 2,336,140 florins in 1917.

In 1892 the Northern Mutual Hail Society (*Onderlinge Noordelijke Hagelverzekering-Maatschappij*) arose at Gröningen. It levies a single premium of 0.10 florin the hectare and repays a maximum of 350 florins a hectare; it has needed special contributions only in 1906 when losses amounted to 28,800 florins for 53 members, and 3 florins per 100 florins of the letting value of the insured fields had to be exacted from each member. Members numbered 672 in 1911, 1070 in 1915, 1132 in 1916 and 1135 in 1917; the number of insured hectares was 14,413 in 1911, 21,063 in 1915, 22,000 in 1916, 21,153 in 1917; the insured value 2,882,600 florins in 1911, 6,489,948 florins in 1915, 8,798,000 florins in 1916, and 9,953,857 florins in 1917.

The Mutual Hail Society of the Three Northern Provinces of Gröningen, Frisia and Drenthe (*Onderlinge Hagelverzekering-Maatschappij in de drie Noordelijke Provinciën Groningen, Friesland en Drenthe*) was founded in 1887 and has a somewhat complicated system of fixed and exceptional premiums. The membership was 1404 in 1912, 2764 in 1915, 2806 in 1916, 2642 in 1917; the number of insured hectares was 17,194 in 1912, 22,105 in 1915, 22,404 in 1916, 22,005 in 1917; the insured value was 3,705,483 florins in 1912, 5,464,889 florins in 1915, 7,750,088 florins in 1916 and 8,420,411 florins in 1917.

These are the only Dutch societies insuring against hail. In addition

15,266 hectares are insured abroad, in Germany, for a value of 3,053,200 florins (1912 figures).

The statistics we have reproduced are enough to give the impression that insurance against hail is not much practised in Holland, a fact fully confirmed when the proportion which the insured area forms of the total cultivated area is considered. The provine of Zealand has 16 per cent. of its crops insured and Gröningen 32 per cent., but generally in the whole country this percentage is hardly 13. The circumstance that the existing companies have hardly ever needed to supplement their very low premiums shows that the losses caused by hail in Holland are rarely considerable. Thus the fact is explained that, on the one hand, the peasants feel no great need to insure, and that, on the other hand, in years of heavy falls of hail unpreparedness and inadequacy and their grievous consequences occur.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

1. INSURANCE AGAINST HAIL IN SASKATCHEWAN IN 1918 (1). — *The Monetary Times.* Toronto, 2- November 1918.

Companies insuring against hail in 1918, other than the Saskatchewan Hail Assurance Association, enjoyed a premium income of $2,116,330 and suffered losses amounting to $772,767, the percentage of losses being 36.51. The following figures, showing premiums and losses, are those of the preliminary net returns and are subject to revision by the head office.

Company.	Premiums.	Losses.
Acadia Fire	$ 63,108	$ 32,185
Arcola Mutual	39,968	22,903
British America	49,275	16,097
British Crown	81,457	29,405
Canadian Indemnity	154,110	74,089
Canada Security	111,067	58,752
Connecticut Fire	176,471	60,692
Dominion Fire	57,102	11,731
Emp'oyers' Liability	212,063	54,314
Excess	115,462	44,383
Farmers' Fire and Hail	29,682	9,763
Great North	97,967	62,845
Home	293,507	109,741
Hartford Fire	204,073	84,666
Nova Scotia Fire	50,971	14,221
New York Underwriters	37,104	7,858
Rochester Underwriters	68 913	47,100
Winnipeg Fire	22,236	5,209
Westchester Fire (not reported).		
United Assurance	51,752	26,803
Total	2,116,330	772,767

The comparative statement, reproduced below, was prepared by the Superintendent of Insurance for Saskatchewan. It shows that the amount

(1) Cf. our issues for May, August and November 1917 and January, May, July and August 1918.

of premiums for insurance against hail fell off in 1918, largely because of the condition of the crop in the western part of the province. The early frost of 23 and 24 July caused many contracts to be cancelled, and the income of the companies was noticeably affected in consequence. In all 24,556 policies were issued by the companies in 1918 and 567 contracts were cancelled.

Year	Premiums	Losses	Percent. of premiums formed by losses
1909	281,035	180,213	64
1910	547,995	237,537	43
1911	787,253	532,840	67
1912	1,051,125	757,640	72
1913	783,194	485,405	61
1914	747,838	173,443	23
1915	1,363,001	438,619	32
1916	1,417,853	1,872,408	132
1917	2,409,746	687,085	28
1918	2,116,330	772,767	36

Rates are decided not by the Insurance Department but by the Canadian Hail Association, of which practically all the companies are members, and which duly takes into account the individual experiences of the companies in the various districts of the province.

The Saskatchewan Hail Assurance Association, which does not come within the jurisdiction of the Superintendent of Insurance, had losses of $1,030,000, to meet which it has funds amounting to $820,000

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2. THE RESULTS AND THE REORGANIZATION OF INSURANCE AGAINST HAIL IN SASKATCHEWAN. — *The Public Service Monthly*, Vol VII, Nos 7 and 8. Regina, February and March 1919.

The Superintendent of Insurance has compiled statistics showing the details as to insurance against hail from 1913 to 1917. His figures are the following :

Year	Premiums paid	Claims paid
	$	$
1913	783,194.42	485,305.79
1914	747,838.68	173,443.44
1915	1.363,001.66	438,619.37
1916	1.417,853.21	1,872,408.75
1917	2,409,746.66	687,085.69
	6,721,634.53	3,656,863.4

If we compare the figures showing premiums paid with those showing claims paid, we find that the latter were equal to 61.96 per cent. of the former in 1913, 23.19 per cent. in 1914, 32.18 per cent. in 1915, 132.06 per cent. in 1916, and 28.51 per cent. in 1917, or an average of 55.58 per cent. in all the five years.

A number of amendments of the Saskatchewan Municipal Hail Insurance Act (1) have been passed. The original Act only provided for a maximum flat rate, not exceeding 4 cents an acre, on all assessable lands in all rural municipalities which had adopted the hail insurance by-law. The directors of the association are now authorized to fix an additional rate per acre to be levied on all the land under cultivation of one owner in excess of 40 acres. This means that, besides the flat rate of 4 cents an acre, an additional rate can be levied, sufficient to provide money to pay the losses in full in any year. It is further provided that the additional rate may be imposed by the board of directors in 1919 and must be imposed in 1920.

It has been duly provided that a farmer objecting to paying hail insurance taxes may withdraw his land from assessment, thus relieving himself from the obligation to pay and depriving himself of the possibility of being indemnified for his losses. The following lands may be withdrawn from assessment :

" 1. Land not exceeding an area of 640 acres of which at least 25 per centum is under cultivation ;

" 2. Land exceeding 640 acres of which at least 50 per centum is under cultivation ;

" 3. One or more quarter sections (2) completely enclosed by a substantial fence and used for grazing and hay purposes only ;

" 4. An unpatented quarter section held under homestead, pre-emption or purchased homestead entry upon which there are less than 40 acres under cultivation ;

" 5. One or more quarter sections, with less than 40 acres per quarter section under cultivation, the remaining portion of which is completely enclosed by a substantial fence and used for grazing and hay purposes only ".

Lands withdrawn as above under clauses 1 and 2 can be withdrawn for a minimum period of two years and as much longer as the owner wishes. Lands withdrawn under clauses 3, 4 and 5 can only be withdrawn for one year at a time.

The Act has also been amended so as to provide that when there is a loss by hail of less than 5 per cent. the cost of inspection is born by the loser.

The Act now specifically provides that no indemnity will be paid for damage sustained after the grain has been cut and harvested or for damage due to any other cause than hail.

(1) See our issue for May 1917, pp. 37 to .

(2) 1 section contains 640 acres.

FINLAND

INSURANCE AGAINST MORTALITY AMONG LIVE STOCK IN 1915. — *Suoman Tilastollinen Vuosikirja*, 1917 (Statistical Yearbook of Finland, 1917). Helsingfors, 1918.

Insurance against mortality among live stock is practised in Finland by four large capitalist companies and numerous local associations.

The development of the business of the capitalist companies from 1892 to 1915 is shown by the following table:

Year	Insured animals		Insured value	Premiums	Losses		Amount of costs and commissions
	Horses	Cattle	(in francs)	(in francs)	Number	Amount (in francs)	(in francs)
1892	3,700	—	1,492,818	10,645	55	16,700	3,839
1893	5,331	—	2,063,929	20,588	97	27,678	6,707
1894	6,514	—	2,996,444	33,640	170	48,500	9,313
1895	7,038	—	3,451,837	52,089	208	48,769	11,460
1896	7,418	—	3,671,336	57,381	?	50,158	11,514
897	10,940	6,282	5,773,948	112,300	396	76,154	35,778
1898	15,287	7,131	7,824,696	138,157	492	93,055	43,765
1899	19,640	7,615	10,052,018	202,621	715	153,540	53,313
1900	20,089	5,781	10,030,530	185,085	715	173,695	63,379
1901	18,805	4,238	8,720,512	188,611	725	180,664	77,438
1902	17,137	2,947	7,528,995	163,630	615	143,470	64,068
1903	15,186	2,667	6,574,610	168,650	512	124,820	61,033
1904	12,333	2,003	5,389,090	154,211	164	109,369	57,218
1905	12,192	6,114	5,921,200	167,678	421	95,788	57,132
1906	12,552	8,720	6,476,355	179,613	453	100,777	47,694
1907	13,856	9,637	7,853,280	206,869	535	124,753	52,063
1908	15,440	10,927	8,486,105	221,343	525	121,425	60,642
1909	21,790	14,127	11,107,024	254,106	725	175,291	70,738
1910	24,385	16,393	12,729,477	276,230	881	215,726	82,748
1911	27,188	17,428	13,877,492	324,612	1 018	249,922	102,171
1912	27,690	17,166	13,947,426	369,961	915	224,466	111,542
1913	28,261	17,585	13,935,763	370,958	1,117	244,610	119,915
1914	27,823	17,776	13,797,925	369,148	1,170	251,495	127,953
1915	26,715	19,211	13,586,330	380,037	1,073	256,180	128,620

As to the local associations insuring against mortality among live stock we have data for the years from 1904 to 1915. They obtained in this period the following results:

1) *Importance of Risks Covered.*

Year	Number of associations	Insured animals		Value of insured animals		
		Horses	Cattle	Horses	Cattle	Total
1904	40	12,355	30,270	4,083,413	2,807,586	6,890,999
1905	56	17,901	35,687	5,933,733	3,112,219	9,045,952
1906	76	21,892	40,713	7,190,815	3,602,131	10,793,146
1907	81	25,796	41,370	8,531,500	3,805,866	12,337,366
1908	85	30,360	41,842	10,099,683	3,968,928	14,068,611
1909	91	28,769	43,472	9,860,222	4,158,856	14,019,078
1910	100	29,495	42,107	10,323,003	4,110,803	14,433,806
1911	106	31,326	39,776	10,956,060	3,962,867	14,918,927
1912	111	32,634	38,293	11,157,366	4,023,928	15,181,294
1913	122	34,162	40,260	12,026,073	4,497,972	16,524,045
1914	126	34,181	42,685	12,090,842	5,008,672	17,099,514
1915	128	33,667	40,967	11,956,469	5,149,657	17,122,459

2) *Receipts and Expenditure.*

Year	Premiums received	Number and importance of losses				Costs
		Horses		Cattle		
		Number	Cost	Number	Cost	
1904	67,715	182	40,025	447	24,640	7,133
1905	94,741	268	56,957	639	33,662	10,852
1906	119,430	317	72,623	710	39,730	12,873
1907	127,253	389	76,105	591	36,980	15,551
1908	151,800	462	103,806	497	33,898	19,369
1909	163,769	513	116,298	623	40,617	17,220
1910	195,936	591	121,027	537	38,291	18,751
1911	261,341	734	179,627	551	39,232	25,207
1912	213,940	706	151,121	594	42,222	24,098
1913	241,753	648	146,035	522	42,099	27,693
1914	242,379	709	151,211	602	49,301	29,602
1915	244,062	625	148,499	585	49,326	34,161

The figures referring to the value of the insured cattle need a slight correction, for they include, for each year from 1904 to 1914, a small sum

which refers to other animals. This addition is 510 francs in 1904, 6,595 francs in 1905, 6,300 francs in 1906, 6,995 francs in 1907, 10,010 francs in 1908, 11,885 francs in 1909, 29,615 francs in 1910, 19,515 francs in 1911, 21,065 francs in 1912, 23,673 francs in 1913 and 20,733 francs in 1914.

As is seen, although there was a slight retrogression which the general situation is amply sufficient to explain, the local insurance associations have an importance which now much exceeds that of the large capitalist companies. The latter seem, moreover, to be going through a fairly serious crisis, as appears when their receipts and expenditure for the last five years are compared:

Receipts and Expenditure of the Societies Insuring against Mortality among Live Stock from 1911 *to* 1915.

Year	Receipts	Expenditure
	francs	francs
1911	321,612	352,093
1912	369,981	336,008
1913	370.958	364,525
1914	369,148	379,448
1915	380,037	384,800
	1,814,736	1,816,874

Expenditure exceeds receipts by 2,138 francs. The following are the receipts and expenditure of the local associations in the same period.

Receipts and Expenditure of Local Associations from 1911 *to* 1915.

Year	Receipts	Expenditure
	francs	francs
1911	261,341	244,066
1912	213,940	217,441
1913	241,753	215,827
1914	242,379	230,114
1915	244,062	231,986
	1,203,475	1,139,434

Receipts exceed expenditure by 64,041 francs, although the value of the insured risks is far greater than that covered by the capitalist companies. This difference between the two kinds of enterprises depends above all on costs of management which are far higher in the large companies that in the local associations. In the period considered they amounted to 600,201 francs in the case of the former and only 140,161 francs in that of the latter

FRANCE.

AN INSURANCE OF LIVE STOCK FEDERATION DURING THE WAR. — *Journal d'agriculture pratique*, Paris, 24 April 1919.

The Committee of the Federation and Reinsurance Fund of the Communal Mutual Societies for Insurance against Mortality among Live Stock in the *arrondissements* of Chaumont and Wassy (Haute-Marne) held a general meeting at Chaumont on 1 March.

This federation, which enjoyed a real prosperity, has been much tried by the years of war. From the report on the years 1916-17 and 1917-18 to the meeting it appears that it has a large deficit. A sum exceeding receipts by 65,722.12 francs has been paid out in benefits. This excess has been covered by a sum taken from the reserves of the Reinsurance Fund.

During 1917-18, 201 communal mutual societies grouped in the federation 8,311 head of cattle worth 3,865,883 francs, or an average of 465 francs a head, and 4,374 horses valued at 3,190,470 francs or an average of 730 francs a horse. In the case of cattle there was real loss of 218 head valued at 87,681.74 francs. For these losses benefits of 66 per cent. or 57,869.85 francs were paid, which is to say that there was an average mortality of 2.26 per cent. which should necessitate a premium rate of 1.49 per cent. In the case of horses the loss was of 170 animals valued at 104,789.05 francs, so that the average mortality was 3.28 per cent., necessitating a premium rate of 2.16 per cent.

The same report states that the situation has not improved during the current year. The premiums received will be insufficient to cover the expenditure on granting benefits for losses of stock, especially in the case of horses.

The meeting decided unanimously that it was necessary in present circumstances to raise the price of the insured animals, and it fixed maximum rates as follows : for cattle, a maximum of 1,000 francs up to eight years of age ; for horses, a maximum of 1,500 francs up to twelve years of age. Cattle above eight years of age and horses above twelve years of age have their maximum estimated value for insurance automatically reduced by 10 per cent. At the same time the meeting proceeded to raise the rate of insurance premiums, fixing them as follows :

Cattle.

1) Normal rate . . . . . 1.50 per cent.

2) Rate applicable to societies which have throughout had a deficit, years of distoma being excepted . . 1.75 and 2 per cent.

Horses.

1) Normal rate . . . . . 2 per cent.

2) Rate applicable to societies which have throughout had a deficit . . . . . 2.25 and 2.50 per cent.

3) Rate applicable to cart-horses employed by contract . . . . . 3 per cent.

The rate of subscription to the reinsurance fund is 0.15 per cent.

HUNGARY

INSURANCE AGAINST HAIL IN 1918 — *Oesterreichische Versicherungs-Zeitung*, Vienna, No 46, 16 November 1918,

As appears from the reports hitherto published, 1918 may be considered to have been a favourable year for insurance against hail.

The Hungarian companies and the Austrian companies operating in Hungary issued 30,366 policies for the amount of more than 750,000,000 crowns; the losses, of which there were 6,909 declarations, amounted to 6,100,000 crowns. Premiums received amounted to 25,300,000 crowns as against 18,700,000 in the previous year. The fact is to be noticed that the number of policies issued diminished, as compared with 1917, by 9500 crowns. The average loss was 20.56 per cent.

The movement of the business of the various insurance companies was as follows:

Insurance Companies	Number of Policies	Insured Capital (Millions of crowns)	Premiums Received (Millions of crowns)
Erste Ungarische	10,017	256	9,104
Ungarische Hagel	3,690	132	43,000
Southern	5,186	155	4,175
Ung.-Französische	4,295	79	2,852
Land	1,834	34	1,228
Phönix	1,329	39	1,356
Donau	1,193	29	718
Wiener Versicherung	522	10	312
Vaterländische	3,300	32	1,205

REGENCY OF TUNIS

1. AGRICULTURAL MUTUAL INSURANCE AGAINST FIRE FROM 1913 to 1917 — *Statistique générale de la Tunisie. Année* 1917, Tunis, 1918

The position of agricultural mutual insurance against fire in the Regency of Tunis, in each of the years from 1913 to 1917, can be resumed as follows:

1 *Receipts*

Year	Membership	Insured values (in francs)	Subscriptions paid (in francs)	Grants (in francs)	Local cancellations (in francs)	Supplementary receipts and cancellations (in francs)	Total receipts (in francs)
1913 . .	364	7,416,737	55,421 68	4,487.50	2 010.40	6,651.11	68,570 69
1914 .	384	7,875,699	53,883.29	6,000 00	3,167 40	6,094 65	68,145 34
1915 . .	509	16,324,743	121,960.15	5,000 00	5,865 53	14,266 93	147,092 61
1916 .	563	14,817,284	83,212 93	5,000.00	6,630 10	13,034 93	107,877 96
1917 . .	652	23,231,069	119,150 67	5,000.00	—	4,368.37	128,519.04

2. *Expenditure*

Year	Number of fires	Benefits paid (in francs)	Other costs (in francs)	Total expenditure (in francs)
1913	9	18,029 60	1,899 37	22,928.97
1914	6	26,003.66	6,044.85	32,048.51
1915	6	41,351 32	9,047.06	50,398 38
1916	17	35,954.10	7,268 91	41,223.01
1917	16	62,837.53	7,519 07	70,356.60

It follows from these two tables that the position of the mutual societies insuring against fire was satisfactory. In the five years considered receipts exceeded expenditure by 45,651.72 francs in 1913, 36,096.88 francs in 1914, 96,694.23 francs in 1915, 66,654.95 francs in 1916 and 58.162.44 francs in 1917 These results are the more noteworthy because the grants to these

societies amounted to only 5,000 francs a year, and are therefore a mere mark of goodwill on the part of the public authority without which the balance-sheets would still be quite satisfactory.

2. MUTUAL INSURANCE AGAINST HAIL FROM 1913 TO 1918. — *Statistique générale de la Tunisie*, Année 1917. Tunis, 1918.

The position of insurance against hail is less favourable owing to the risks to which this insurance is perpetually exposed. The position of the Tunisian mutual societies undertaking it from 1913 to 1917 can be resumed as follows:

1. *Receipts.*

Year	Membership	Insured value (in francs)	Subscriptions paid (in francs)	Grants (in francs)	Other receipts (in francs)	Total receipts (in francs)
1913	124	3,236,370	26,634.84	6,500	90.03	33,724.87
1914	154	3,253,261	27,762.22	14,000	132.23	41,894.45
1915	254	10,538,211	79,289.57	15,000	75.39	94,364.96
1916	215	6,187,325	51,210.73	14,000	1,095.64	66,306.37
1917	243	8,672,916	71,471.35	14,000	1,724.42	87,195.77

2) *Expenditure.*

	Number of cases of loss	Benefits paid (in francs)	Other costs (in francs)	Total expenditure (in francs)
1913	14	47,601.16	11,181.96	58,783.12
1914	4	27,005.98	7,646.85	34,652.83
1915	64	324,706.48	36,230.31	360,936.79
1916	9	13,335.53	6,512.03	19,847.56
1917	5	7,551.98	7,097.20	14,649.18

As is seen, only three years brought a profit — 1914 a profit of 7,241.62 francs, 1916 a profit of 46,458.81 francs, and 1917 one of 72,546,59 francs. On the other hand two years show a deficit — 1913 one of 25,058.25 francs

and 1915 one of 266,571.83 francs. Altogether, as against 323,486.42 franc, of receipts, of which 63,500 francs were grants, in the five years considereds 488,869.48 francs were paid out in benefits and various costs.

SPAIN

INSURANCE OF LIVE STOCK IN SPAIN DURING THE WAR. — *La Cotización Española*, No. 674. Madrid, 10 November 1918.

We take from the review, *La Cotización Española*, some data as to the development and importance of insurance of live stock in Spain during the first four years of the European war.

The business connected with this branch of insurance is divided into two large classes, one concerning insurance against mortality and accidents, the other insurance against the theft or straying of animals.

It is to be noted that these two classes have not developed equally in Spain. The insuring business of the first class has not made progress in the same measure as that of the second class for various reasons, especially because insurance against mortality and accidents lacks scientifically compiled tables, so that it can be effected only approximately, taking the amount of premiums as basis, and also because there are no companies in Spain which reinsure these risks, and because feigned losses are frequent, as are the epizootics which have so many victims among live stock.

On the other hand the business of insuring against the theft and straying of animals has had a very large development in many Spanish provinces and has thus compensated the companies for their losses in connection with business of the first class.

We should note that 14 Spanish companies undertook this branch, of insurance in 1913; of them *La Ganadera Española*, *La Mutual Valenciana*, *La Protección de la Agricultura Española* and *La Unión Gestora Valenciana* ceased to be active; but, on the other hand, certain new companies undertook insurance, namely *La Sebcría Bilbania*, the *Banco Español de Seguros de Ganaderos*, *La Esperanza* and *La Protectora Industrial*, so that in 1917 there were still 14 insurance companies, as in the year before the war.

We reproduce, as reflecting the development of these companies' business, the figures showing the amounts of premiums received in the five years from 1913 to 1917:

Years	Premiums received — Pesetas	Difference — Pesetas
1913	2,523,931.56	—
1914	2,479,274.67	— 155,343.11
1915	2,762,963.07	+ 283,688.40
1916	3,202,119.34	+ 439,156.27
1917	3,586,825.08	+ 384,705.74

As appears from these data, the declaration of war, which led in the first months to a notable exportation of horses and mules, caused the premiums received in 1914 to be less by 153,343.11 pesetas than those received in 1913. In 1915 on the other hand, exporting being less, the premiums received increased by 283,688.40 pesetas and in 1916 and 1917 they continued to increase, until in 1917 they exceeded by 1,062,893.52 pesetas their amount in 1913.

Part III: Credit

GREAT BRITAIN AND IRELAND.

LAND PURCHASE CREDIT IN IRELAND IN THE YEARS 1912-13 TO 1916-17.

SOURCES (OFFICIAL).

REPORTS OF THE IRISH LAND COMMISSIONERS for the Periods from 1st April, 1912, to 31st March, 1913: 1st April, 1913, to 31st March, 1914: 1st April, 1914, to 31st March 1915: 1st April, 1915, to 31st March, 1916 and 1st April, 1916, to 31st March, 1917 Dublin, 1914, 1915, 1916, 1917, 1918.

REPORTS OF THE ESTATES COMMISSIONERS for the same years. Dublin, 1914, 1915, 1916, 1917, 1917

REPORTS OF THE CONGESTED DISTRICTS BOARD FOR IRELAND for the same years Dublin 1913, 1914, 1915, 1916, 1917

INTRODUCTION.

The various systems whereby State credit has been afforded to tenant-farmers in Ireland to enable them to purchase their holdings have already been described in this Review (1). No new method has been introduced since the previous articles were written, and in this article we propose merely to give statistics of land purchase credit in Ireland in the official years 1912-13 to 1916-17, together with aggregate statistics up to March 31st, 1917. (2) In the case of systems which are still in use we will repeat briefly the explanations of the methods adopted, but we refer the reader to the previous articles for an account of the systems under which all operations were completed prior to April 1st, 1912. These latter include the methods introduced by the Irish Church Act, 1869; the Irish Land Acts, 1870, 1881, 1885; the Land Law (Ireland) Act, 1888; the Purchase of Land Act, 1891, and the Land Law (Ireland) Act, 1896. Operations are still being carried on

(1) Issues of October, 1911, and June, 1913.

(2) The figures are, in the main, taken from the Reports indicated as the sources of this article. For some supplementary figures, which have enabled us to make our statistics more nearly complete than they would otherwise have been, we are indebted to our correspondent in Ireland, Mr. T. P. GILL, who obtained them for us through the courtesy of the departments concerned.

under systems introduced by the Acts of 1891 and 1896, as modified by the Irish Land Acts of 1903 and 1909, but the most important operations are those under the system introduced by the Land Act of 1903, and the same system as modified by the Land Act of 1909. Other methods, of minor importance, will also be noticed.

In a previous article the various operations were grouped according to the Acts under which they were carried out: we will here group them according to the method adopted or the particular object in view.

1 — *SALES BETWEEN LANDLORD AND TENANT.*

§ 1. DIRECT SALES.

The earliest form of land purchase credit was the advance of money to the tenant-farmer to enable him to pay the purchase-money to the landlord. This system was introduced by the Irish Church Act for the purchase of glebe lands and was extended to ordinary holdings by subsequent Acts up to that of 1896 with varying provisions as to the proportion of the purchase-money advanced, the terms of repayment, etc. It was maintained, side by side with the system of purchasing estates and reselling them to the tenants, by the Acts of 1903 and 1909.

The advances in the case of direct sales include:

(*a*) Advances made by the Land Commission (1) under the Acts of 1891 to 1903. The whole of the purchase money is advanced; it is paid to the landlord in cash and repaid by the tenant in annuities at the rate of 3 ¼ per cent. for 68 ½ years.

(*b*) Advances made by the Land Commission under the Acts of 1891 to 1909. In this case the purchase-money is paid to the landlord in Guaranteed Stock bearing interest at 3 per cent. The advances are repayable by the tenant in annuities at the rate of 3 ½ per cent. for 68 ½ years.

(*c*) Advances made by the Estates Commissioners (2) under the Act of 1903. In the earlier transactions under this head the purchase money was advanced in cash, but by the Act of 1909 authorisation was given to make the advances, in the case of agreements pending at the time the Act was passed, in guaranteed 2 ¾ per cent. stock, if the vendor agreed to this being done. The advances are repayable by 3 ¼ per cent annuities in a period of 68 ½ years.

(1) The Land Commission was instituted by the Land Law (Ireland) Act, 1881, primarily as a tribunal for fixing fair rents. Duties in relation to land purchase were, however, also assigned to it.

(2) The Estates Commissioners are a body instituted by the Act of 1903. They are a group of three Commissioners and are legally considered as forming part of the Land Commission. Speaking broadly, all land purchase transactions in which estates are sold as a whole are carried out by the Estates Commissioners. The Land Commission (in its original form) deals with cases where holdings are sold separately.

TABLE I. — *Direct Sales between Landlord and Tenant.*

	Year	Number of Loans	Number of Estates	Area in Acres	Rent (of tenanted land only)	Purchase Price	Amount of Advances	Number of Years' Purchase of Rent
				£	£	£	£	
(*a*) Advances made by the Land Commission under the Acts of 1891 to 1903	1912–13	16	—	479	179	3,901	3,901	—
	1913–14	10	—	552	123	2,163	2 163	—
	1914–15	1	—	87	87	1,211	1,211	—
(*b*) Advances made by the Land Commission under the Acts of 1891 to 1909	1912–13	38	4	1,483	364	8,787	8,787	24 1
	1913–14	11	5	246	96	1,997	1,997	20 4
	1914–15	1	1	26	8	201	201	23.0
	1915–16	1	1	52	11	232	232	21 1
	1916–17	1	1	28	14	146	146	10 1
(*c*) Advances made by the Estates Commissioners under the Acts of 1903.	1912–13	17,455	652	545,429	263,608	5,817,704	5,773,633	21 8
	1913–14	13 260	580	468 103	208,297	4,738,478	4,666,677	22 2
	1913–15	7,883	159	285,143	127,356	2,929,574	2,885,256	22 2
	1915–16	4 309	87	134,940	49,616	1,147,065	1,109,147	21 5
	1916–17	3,500	93	96,141	49,922	1,146,287	1 133 180	22 1
(*d*) Advances made by the Estates Commissioners under the Acts of 1909	1912–13	3,385	348	102,298	19,403	1,026,062	1,016,788	20.5
	1913–14	2,386	343	85,744	34,712	715 905	679,092	20 3
	1914–15	1,095	238	69,727	25,466	546,203	538,545	20 5
	1915–16	1,332	125	41,740	16,897	347,937	337,344	20 5
	1916–17	1,114	100	40,623	17,896	365,407	351,596	20 3

(*d*) Advances made by the Estates Commissioners under the Act of 1909. The purchase money is paid in guaranteed 3 per cent. stock and is repayable by 3 ½ per cent. annuities in 68 ½ years.

Table I shows the advances in each year from 1912-13 to 1916-17 in the case of direct sales between landlord and tenant. No such advances were made by the Land Commissioners under the Acts of 1891 to 1903 in the years 1915-16 and 1916-17.

§ 2. Sales in the Land Judge's Court.

Sales in the Land Judge's Court (the Court which deals with bankrupt estates) were of two kinds. There were sales between landlord and tenant arranged directly by the Court, in which the money is advanced by the Land Commission, and sales effected through the intermediary of the Land Commission under Section 40 of the Act of 1896 According as these sales (of either class) were carried out under the provisions of the Act of 1903 or under those of the Act of 1909, the purchase-money is paid respectively in cash or in guaranteed 3 per cent. stock, and is repayable in annuities of 3 ¼ or 3 ½ per cent. respectively. There were no direct

Table II. — *Sales in the Land Judge's Court.*

	Year	Number of Loans	Number of Estates	Area in Acres	Rent (of tenanted land only)	Purchase Price	Amount of Advances	Number of Years' Purchase of Rent (tenanted land only)
					£	£	£	
(*a*) Direct Sales in Court of Land Judge under the provisions of the Act of 1903.	1912–13	38	5	732	367	7,246	7,246	19.7
	1913–14	29	4	633	213	4,704	4,704	22.0
	1915–16	13	1	200	70	1,469	1,469	20.8
	1916–17	9	1	201	65	1,344	1,344	20.5
(*b*) Direct Sales in Court of Land Judge under the provisions of the Act of 1909.	1912–13	89	15	2,788	1,021	20,450	20,443	20.0
	1913–14	46	13	1,215	636	12,478	12,472	19.6
	1914–15	4	3	404	115	1,888	1,888	16.3
	1915–16	25	6	939	306	6,024	6,024	19.7
	1916–17	5	2	236	94	1,954	1,954	20.8
(*c*) Sales in Court of Land Judge through the intermediary of the Land Commission under the provisions of the Act of 1909.	1913–14	42	1	443	177	3,508	3,508	19.8
	1914–15	35	2	380	148	2,858	2,858	19.3
	1915–16	4	2	187	92	1,215	1,215	13.1

sales in the Land Judge's Court under the provisions of the Act of 1903 in the year 1914-15 : no sales through the intermediary of the Land Commission under the provisions of the Act of 1903 in any of the years under review, nor any such sales under the provisions of the Act of 1909 in the years 1912-13 or 1916-17.

Table II contains statistics of the sales in the Land Judge's Court.

§ 3. Redemption of Rent.

A few advances were made during the period under review for the redemption of head-rents, in accordance with the Redemption of Rent Act 1891.

In 1913-14 and 1916-17 advances were made under this Act, as modified by the Act of 1903, while in 1913-14 and 1915-16 advances were made under the Act of 1891 as further modified by the Act of 1909. In all cases the advances are made by the Land Commission

Table III gives particulars of the loans :

Table III — *Loans for Redemption of Rent.*

		Number of Loans	Number of Estates	Area in Acres	Rent	Purchase Price	Amount of Advances	Number of Years' Purchase of Rent
					£	£	£	
(*a*) Advances under the Redemption of Rent Act 1891, as modified by the Act of 1903 .	1913–14	1	1	27	28	360	360	12.5
	1916–17	1	1	73	46	960	960	20 7
(*b*) Advances under the Redemption of Rent Act, 1891, as further modified by the Act of 1909	1913–14	1	1	109	120	2,700	2,700	22.5
	1915–16	1	1	65	84	1,900	1,900	22.5

II. — *PURCHASE OF ESTATES FOR RE SALE TO TENANTS.*

§ 1. Estates purchased directly from the landlord.

The Estates Commissioners are empowered to purchase estates direct from the landlord and to sell them to the tenants. If this operation is carried out under the Act of 1903 the purchase-money s paid in cash and is repayable by the tenant in 3 ¼ per cent. annuities; if under the Act of 1909, the advances are in guaranteed 3 per cent. stock and are repayable in 3 ½ per cent. annuities.

In Table IV we give statistics of the purchase of estates direct from the landlords n the years under consideration.

TABLE IV — *Purchase of Estates direct from the Landlords.*

		Number of proposed Purchasers on Re sale	Number of Estates	Acres	Purchase Price	Amount of Advances
					£	£
(*a*) Estates purchased directly from the landlords under the provisions of the Act of 1903.	1912–13	1,906	57	53,994	436,401	425,496
	1913–14	1,585	41	48,217	405,475	482,486
	1914–15	1,069	33	48,075	342,667	341,378
	1915–16	241	11	7,544	73,552	73,408
	1916–17	310	15	10,957	87,417	87,390
(*b*) Estates purchased directly from the landlords under the provisions of the Act of 1909	1912–13	315	32	10,180	111,715	110,592
	1913–14	176	17	4,391	50,490	50,485
	1914–15	134	23	5,521	65,467	65,467
	1915–16	307	24	9,676	98,829	97,918
	1916–17	155	13	6,193	55,756	51,979

§ 2. PURCHASE OF ESTATES IN THE LAND JUDGE'S COURT.

The Estates Commissioners are also empowered to purchase estates in the Land Judge's Court for re-sale to tenants The advances are made and are repayable in the same manner as in the case of estates purchased directly from the landlords.

TABLE V. — *Purchase of Estates in the Land Judge's Court.*

	Year	Number of proposed Purchasers on Re-sale	Number of Estates	Area in Acres	Purchase Price	Amount of Advances
					£	£
(*a*) Estates purchased in the Land Judge's Court under the provisions of the Act of 1903.	1912–13	190	6	7,087	63,858	62,716
	1913–14	65	1	2,667	11,953	11,943
	1914–15	90	2	2,995	17,872	17,867
	1915–16	16	3	288	3,784	3,663
(*b*) Estates purchased in the Land Judge's Court under the provisions of the Act of 1909.	1912–13	30	2	1,680	22,516	22,516
	1913–14	14	2	537	4,920	4,920
	1914–15	83	5	2,450	31,823	30,803
	1915–16	44	3	1,457	18,834	16,778
	1916–17	5	1	172	1,644	1,644

Table V contains statistics of the purchase of estates in the Land Judge's Court. No such purchase was made in 1916-17 under the provisions of the Act of 1903.

§ 3. Purchase of estates by the congested districts board.

The Congested Districts Board (1) purchases estates and re-sells them after improvement, to the tenants. The purchase-money is obtained by the Board partly from its own funds, but principally by means of advances from the Land Commission and from the Estates Commissioners.

When the estates are re-sold, the advances to the purchasing tenants are also made by the Land Commission or the Estates Commissioners and a sum corresponding to the amount of those advances, together with the cash received in the cases where the purchaser pays cash, is written off the Board's indebtedness.

In the years under review, advances to the Board for the purchase of estates were made by six different methods:

(1) Advances in cash by the Land Commission under Section 77 of the Act of 1903 for the purchase of estates in the Land Judge's Court or under Section 2 of the Congested Districts Board (Ireland) Act, 1899, for the redemption of superior interests.

(2) Advances by the Land Commission under the same sections, but made in 3 per cent. stock in accordance with the financial provisions of the Act of 1909.

(3) Advances in cash by the Estates Commissioners under Section 72 and 79 of the Act of 1903, for the purchase of estates direct from owners.

(4) Advances by the Estates Commissioners under the same sections, but made in 3 per cent. stock in accordance with the financial provisions of the Act of 1909.

(5) Advances in cash by the Estates Commissioners under section 60 of the Act of 1909. This authorises the Congested Districts Board, when it has entered into negotiations for the purchase of land situated in the congested districts, but has not succeeded in coming to an agreement, to make a "final offer" for the land. If the "final offer" is accepted the money is advanced by the Estates Commissioners.

(6) Advances in cash by the Estates Commissioners under Part IV of the Act of 1909. In the event of a "final offer" made by the Congested Districts Board being refused, Part IV of the Act of 1909 authorises the Estates Commissioners, after certain formalities have been carried out, to issue an order compelling the owner to sell the land to the Board.

In Table VI we give particulars of the landes purchased by the Congested Districts Board out of its own funds. Practically all land so

(1) For an account of the Congested Districts Board and its work, see our issue of February 1915.

purchased consisted of untenanted land which is disposed of partly in enlargements to existing holdings and partly in creating new holdings.

TABLE VI. — *Lands purchased by the Congested Districts Board out of its own funds.*

	Year	Number of Estates	Area in Acres	Purchase Price
				£
Purchase of lands by the Congested Districts Board out of its own funds.	1912–13	9	1,137	9,609
	1913–14	4	649	7,387
	1914–15	5	748	6,624
	1915–16	4	349	3,799
	1916–17	13	2,366	17,071

In Table VII are given the particulars of the advances made to the Congested Districts Board for the purchase of estates.

TABLE VII. — *Advances to the Congested Districts Board for the Purchase of Estates.*

	Year	Estimated Number of Purchasers on Re-sale	Number of Estates	Area in Acres	Purchase Price	Amount of Advances
					£	£
(*a*) Advances by the Land Commission under Sec. 77 of the Act of 1903 and Sec. 2 of the Congested Districts Board (Ireland) Act, 1899.	1912–13	61	2	3,488	19,110	19,110
	1913–14	111	2	3,055	7,562	7,562
	1916–17	130	1	4,459	33,598	33,598
(*b*) Advances by the Land Commission under Sec. 77 of the Act of 1903 and Sec. 2 of the Congested Districts Board (Ireland) Act, 1899, in accordance with the financial provision of the Act of 1909.	1912–13	119	4	2,944	24,388	24,388
	1913–14	105	6	4,721	28,440	28,440
	1914–15	157	5	3,819	22,078	22,078
(*c*) Advances by the Estates Commissioners for the purchase of Estates direct from landlords (Act of 1903).	1912–13	391	12	6,724	58,204	58,204
	1913–14	1,366	33	46,783	327,772	327,772
	1914–15	748	23	23,988	126,036	126,036
	1915–16	403	10	11,464	51,730	51,730
	1916–17	230	4	5,716	58,654	58,654
(*d*) Advances by the Estates Commissioners for the purchase of Estates direct from landlords (Act of 1909).	1912–13	2,254	28	114,962	337,116	337,116
	1913–14	2,366	50	70,596	409,944	409,944
	1914–15	1,480	31	42,747	216,459	216,459
	1915–16	1,125	47	43,926	223,102	222,969
	1916–17	1,619	31	58,950	241,640	241,500
(*e*) Advances by the Estates Commissioners in the case of accepted final offers under Sec. 60 or of compulsory purchase under Part IV of the Act of 1909).	1912–13	357	3	9,194	67,786	67,786
	1913–14	931	18	22,360	209,209	209,209
	1914–15	2,660	34	140,951	526,614	526,614
	1915–16	1,321	10	61,300	254,184	254,184
	1916–17	1,445	18	39,719	154,384	154,384

§ 4. Purchase of Land by Estates Commissioners for the Purpose of Relieving Congestion.

The powers of the Congested Districts Board are strictly confined to the congested districts, but cases occur where it is desirable that land not situated in the congested districts should be purchased for the purpose of relieving congestion. Section 43 and Part IV of the Act of 1909 accordingly conferred upon the Estates Commissioners powers of acquiring such land by "final offer" or by compulsory purchase.

Table VIII gives particulars of the purchases so made in 1912-13, 1913-14, and 1914-15. No purchases of this kind were made in 1915-16 or 1916-17.

Table VIII — *Estates purchased by Estates Commissioners for the Relief of Congestion.*

	Year	Estimated Number of Purchasers on Re-sale	Number of Estates	Purchase Price	Amount of Advances
				£	£
Estates acquired by Estates Commissioners by "final offer" or compulsory purchase (Sec. 43 and Part IV of Act of 1909)	1912–13	44	4	16,488	16,488
	1913–14	23	3	12,080	12,080
	1914–15	1	1	3,017	3,017

§ 8. Purchase of Land for the Re-instatement of Evicted Tenants.

Under the Evicted Tenants Acts, 1907-8, the Estates Commissioners are empowered to acquire untenanted land for the re-instatement of evicted tenants.

During the period under review no advances were made under these Acts in accordance with the financial provisions of the Act of 1903, but the following table shows the advances made under the financial provisions of the Act of 1909. No such advances were made in 1915-16 and 1916-17.

TABLE IX. — *Purchase of Land under Evicted Tenants Acts* 1907-08

	Year	Estimated Number of Purchasers on Re-sale	Number of Estates	Area acres	Purchase Price	Amount of Advances
Purchase of land under Evicted Tenants Acts, 1907-08, in accordance with financial provisions of Act of 1909	1912–13	54	11	2,406	28,492	28,492
	1913–14	40	3	935	17,556	17,556
	1914–15	5	2	263	5,600	5,600

III. — *RE-SALE OF ESTATES PURCHASED*

We will now give figures relating to the re-sales of the estates purchased. It should be observed that the statistics of re-sale should not be taken into account in calculating the total advances made, as otherwise the credit given in these operations of purchase and re-sale would be counted twice

§ 1. RE-SALE OF ESTATES PURCHASED BY THE ESTATES COMMISSIONERS

We are obliged to group together (Table X) the re-sales of all estates purchased by the Estates Commissioners, as the reports of the Estates Commissioners for 1915-16 and 1916-17 only give total figures for the re-sales of estates purchased directly from landlords, in the Land Judge's Court, and under the Evicted Tenants Acts They distinguish, however, between estates purchased under the Act of 1903 and the Act of 1909.

For the years 1913-14 to 1916-17 we give figures relating to the re-sale of lands acquired under the Evicted Tenants Acts. It should be noted, however, that the figures for 1915-16 and 1916-17 are included partly in the total figures given for those years for the re-sale of all estates purchased under the Act of 1903 and partly in those for the re-sale of all estates purchased under the Act of 1909

Part of the land acquired under the Evicted Tenants Act is sold to persons other than evicted tenants. On the other hand, the lands so acquired are not the only lands utilised for the re-instatement of evicted tenants as part of the untenanted land acquired under the Acts of 1903 and 1909 is also sold to such persons.

TABLE X. - - *Re-sale to Tenants of Estates purchased directly from Landlord and in Land Judge's Court.*

	Year	Number of Loans	Area in acres	Rent (of tenanted land only)	Purchase Price	Amount of Advances	Number of Years' Purchase of Rent (Tenanted Land only)
				£	£	£	
(*a*) Re-sale to tenants of estates purchased directly from the landlord under the Act of 1903.	1912–13	1,368	61,302	9,019	360,078	354,558	20.5
	1913–14	368	17,549	2,294	116,770	109,724	21.2
	1914–15	588	18,008	3,862	187,872	184,420	20.4
(*b*) Re-sale to tenants of estates purchased in the Land Judge's Court under the Act of 1903.	1912–13	465	11,169	5,081	119,181	117,728	20,9
	1913–14	53	1,982	631	21,531	21,367	21 6
	1914–15	36	1,567	980	24,691	24,154	21.7
(*c*) Re-sale of land purchased under the Evicted Tenants Acts.	1913–14	12	—	501	6 986	6,778	—
	1914–15	61	—	2,333	34,193	34,049	—
	1915–16	71	—	2,574	43,689	43,531	—
	1916–17	33	—	1,418	23,851	23,808	—
(*d*) Re-sale to tenants of estates purchased directly from landlords under the Act of 1909.	1912–13	100	4,773	411	36,283	36,283	18.2
	1913–14	17	906	41	11,482	10 379	20.1
	1914–15	64	2,198	63	22 819	22,469	20 8
(*e*) Re-sale to tenants of estates purchased in the Land Judge's Court under the Act of 1909.	1912–13	17	1,260	·453	10,736	10,736	21.0
	1913–14	33	1,916	1,137	30,261	30,260	20.8
	1914–15	50	3,177	1,591	40,997	40,996	20.9
(*f*) Re-sale of all estates purchased by Estates Commissioners under the Act of 1903 (Totals of *a*, *b* and part of *c*).	1915–16	1,621	53,158	9,956	143,994	442,270	21.6
	1916–17	1,315	44,852	15,489	468,703	458,033	20.2
(*g*) Re-sale of all estates purchased by Estates Commissioners under the Act of 1909 (Totals of *d*, *e* and part of *c*).	1915–16	36	1,484	—	19,527	19,515	—
	1916–17	20	1,178	175	14,440	12,426	17.3

§ 2. Re-sale of estates purchased by the Congested Districts Board.

Up to March 31st, 1917, the Congested Districts Board had devoted more attention to the acquisition and improvement of estates than to their re-sale to tenants. In consequence the re-sales had fallen very far behind the purchases and the Board had still a large number of estates on their hands awaiting re-sale.

Advances for re-sale were made in the following different manners:

(1) Advances in cash by the Land Commission for re-sale of estates purchased under the Act of 1896. Although no further purchases under this Act were being made in the years under review, the re-sale of estates so purchased was still proceeding.

(2) Advances in cash by the Land Commission for re-sale of estates purchased under Sections 77 of the Act of 1903.

(3) Advances in cash by the Land Commission for re-sale of estates purchased under Sections 72 and 79 of the Act of 1903.

Table XI. — *Re-sales to Tenants of Estates purchased by the Congested Districts Board.*

	Year	Number of Loans	Area in Acres	Rent (of tenanted land only)	Purchase Price	Amount of Advances
				£	£	£
(*a*) Re-sale of estates purchased under Section 43 of the Act of 1896	1912–13	33	272	91	2,307	2,307
	1913–14	31	551	263	6,360	6,360
	1914–15	18	218	49	1,568	1,568
(*b*) Re-sale of estates purchased under Section 77 of the Act of 1903	1912–13	2	69	33	834	834
	1913–14	15	204	56	1,146	1,146
	1914–15	25	530	192	4,901	4,901
(*c*) Re-sale of estates purchased under Sections 72 and 79 of the Act of 1903 (Advances by the Land Commissioners) . .	1912–13	847	17,364	4,952	108,231	108,231
	1913–14	610	12,959	4,933	109,346	108,496
	1914–15	247	5,822	2,212	50,055	50,053
(*d*) Total advances by Land Commission under headings (*a*), (*b*) and (*c*)	1915–16	61	1,816	412	9,265	8,895
	1916–17	1	93	74	1,523	1,523
(*e*) Re-sale of estates purchased under Sections 72 and 79 of the Act of 1903 (Advances by Estates Commissioners). . .	1913–14	19	546	421	10,971	10,971

(4) Advances by the Estates Commissioners for the re-sale of estates purchased under Sections 72 and 79 of the Act of 1903. Only in 1913-14 were such advances made.

In a considerable number of cases purchase agreements had been lodged with the Estates Commissioners for the re-sale of estates purchased under the Sections 72 and 79 of the Act of 1903, as modified by the Act of 1909, but in no case had the holding been vested in the purchasing tenants and, therefore, no advance had been made.

Table XI gives particulars of the re-sales of estates purchased by the Congested Districts Board. The Reports of the Land Commissioners for 1915-16 and 1916-17 do not give separately the advances under the different headings, but give combined figures for the re-sale of estates purchased under all the Acts from 1896 to 1903.

§ 3. Re-sale of demesnes.

Under the Act of 1903, the Estates Commissioners are empowered to advance money to landlords to buy back their demesnes, in the same manner as they advance money to a tenant to purchase his holding. The landlord is, in fact, treated for the purpose of land purchase, as if he were the tenant of the demesne. The practical effect of this provision is to give to the landlord an additional amount of ready money (or stock) which he repays by annual instalments.

In Table XII we give the figures relating to the re-sale of demesnes. These figures are, however, with the exception of the re-sales of demesnes on estates purchased by the Congested Districts Board, included in the figures already given of the re-sale of estates.

IV. — *Statistics up to March 31st, 1917*

§ 1. Sales between landlord and tenants.

We will now give statistics of all land purchase credit in Ireland up to March 31st, 1917.

Table XIII contains the statistics of sales between landlord and tenant. In these we include sales under the Irish Church Act, 1869, although this Act is not included in the statutory definition of "Land Purchase Acts." Unfortunately our figures for sales under this Act are not complete; nor are those for sales under the Acts of 1870 and 1881.

§ 2. Estates purchased.

The figures which we give in Table XIV for estates purchased are almost complete. We are unable, however, to give the estimated number of purchasers on the re-sale of lands purchased by the Congested Districts Board out of its own funds.

TABLE XII. — *Re-sale of Demesnes.*

	Year	Number of Loans	Area in Acres	Purchase Price	Amount of Advances
a) Demesnes on estates in which direct sales between landlord and tenant have taken place under the Act of 1903.	1912-13	8	2,616	41,436	38,480
	1913-14. . .	20	6,107	101,293	84,034
	1914 15.	15	6,437	92,133	85,101
	1915 16. . .	13	4,709	81,089	61,684
	1916 17 . .	8	3,022	48,291	44,326
b) Demesnes on estates in which direct sales between landlord and tenant have taken place under the Act of 1909.	1912-13. .	4	1,168	9,300	8,451
	1913-14.	4	519	7,824	7,754
	1914-15. .	3	1,002	21,420	20,580
(*c*) Demesnes on estates purchased by the Estates Commissioners direct from landlord under the Act of 1903.	1912-13.	6	2,451	24,995	24,905
	1913-14. .	4	1,900	26,752	20,977
	1914-15. .	1	833	10,323	10,323
(*d*) Demesnes on estates purchased by the Estates Commissioners direct from landlords under the Act of 1909	1912-13.	1	735	11,392	11,392
	1913-14.	2	263	3,200	2,097
	1914-15.	1	93	1,097	1,097
(*e*) Demesnes on estates purchased by the Estates Commissioners in the Land Judge's Court under the Act of 1903	1914 15 .	1	72	1,826	1,826
(*f*) Demesnes on estates purchased by the Estates Commissioners in the Land Judge's Court under the Act of 1909.	1912-13. . .		103	1,215	1,215
	1913-14.		472	6,593	6,593
(*g*) Demesnes on estates purchased by Estates Commissioners under Act of 1903. Total of (*c*) and (*e*)	1915-16. .	3	641	9,063	9,063
	1916-17. . .	2	97	1,222	1,222
(*h*) Demesnes on estates purchased by Estates Commissioners under Act of 1909. Total of (*d*) and (*f*).	1915-16. .	1	39	743	735
	1916-17. . .	1	419	5,742	3,728
(*i*) Demesnes on estates purchased by the Congested Districts Board under Secs 72 and 79 of Act of 1903.	1913-14. .	2	573	6,960	6,960
	1915-16 .	2	607	8,149	7,619
	1916-17.	2	295	2,315	2,315
(*j*) Demesnes on estates purchased by the Congested Districts Board under Act of 1909.	1913-14. .	1	844	4,979	4,979
	1914-15. . .	1	655	8,500	8,500
	1915-16. . .	3	694	6,374	6,374
	1916-17. . .	5	1,211	15,868	15,359

TABLE XII — Sales between Landlord and Tenant up to March 31st 1917

	Number of Loans	Number of Estates	Area Acres	Rent (of tenanted land only) £	Purchase Price £		Number of Years' Purchase of Rent £
Direct Sales							
Under the Irish Church Act 1869	6,057	—	—	—	—	1,674,841	—
Under the Act 1870	877	—	52,906	—	859,522	514,536	—
Under the Act 1881	326	—	19,397	15,090	292 470	195,933	19 4
Under the Act 1885	23,338	1,254	880,947	561,197	9,625,763	9,461,259	17 0
Under the Act 1891 and 1896	37,829	2,007	1,243,944	650,614	11,576,695	11,395,871	17 7
Under the Act of 1903 (Land Commission)	385	59	11,601	4,225	97,939	97,585	23 1
Under the Act of 1909 (Land Commission)	66	18	3,034	705	15,058	15,058	21 3
Under the Act of 1903 (Estates Commissioners)	148,764	5 937	871,477	2,389,010	54,966,157	54,367,563	22 4
Under the Act of 1909 (Estates Commissioners)	13,302	1,645	444,104	196,823	4 062,188	3,962,061	20.3
Total Direct	230,944 (1)	10,920	3,527,410 (3)	3,817,670	3,495,792	80,008,969	—
Sales in the Land Judge's Court							
Under Section 40 of Act of 1896	4,574	215	125,699	66,035	1,171,676	1 107,179	17.7
Under Section 40 of Act of 1896 and Act of 1903	582	51	19,738	8,829	174,042	170,625	19 7
Under Sec. 40 of Act of 1896 and Act of 1909	89	6	1,201	562	10 815	10,756	19 2
Under Act of 1903 (Direct Sales)	2,991	189	80,039	33,784	694 816	676,878	20 3
Under Act of of 1903 (Direct Sales)	370	49	10,478	1 590	92,340	92,115	20 1
Total Sales in Land Judge's Court	8,606	510	237 155	113,800	2 133,689	2,057,553	—
Redemption of Rent							
Under the Acts of 1891 to 1896	98	59	6 456	7,365	110,129	98 394	14 9
Under the Act of 1903	10	9	434	521	9,365	9 365	17 9
Under the Act of 1909	2	2	175	204	4,600	4 600	22.5
Total Redemption of Rent	110	70	7,065	8,090	124,094	112 350	
Total Sales between Landlord and Tenant	239,660 (1)	11,500 (2)	7,771,630 (3)	3,930,754	83,753,575	82,178,881	

(1) Not including sales under the Acts of 1809, 1870 and 1881 — (2) Not including sales under the Act of 1869 — (3) Including sales under the Acts of 1860 and 1870

TABLE XIV — *Estates purchased (up to March 1917) Re-sale Terms*

	Estimated Number of Purchases on Re-sale	Number of Estates	Area in Acres	Purchase Price £	
Estates purchased by the Land Commissioners					
Under the Act of 1881	405		11,200	63,124	45,768
Under the Act of 1885	4,029	1[1]	61,678	537,071	531,277
Under the Acts of 1891 to 1896	758	1	50,419	456,539	447,523
Total estates purchased by the Land Commissioners	9,192	207	123,357	1,056,734	1,024,568
Estates purchased by the Estates Commissioners					
Direct from landlords under Act of 1903	22,667	626	738,190	6,417,557	6,371,221
Direct from landlords under Act of 1909	1,335	140	45,140	479,382	473,510
In Land Judge's Court under Act of 1903	5,807	155	177,929	1,607,087	1,584,514
In Land Judge's Court under Act of 1909	215	15	8,334	102,368	99,291
By "final offer" or compulsory purchase under Act of 1909	63	8	2,243	31,585	31,585
Under Evicted Tenants Acts and Act of 1907	629	93	26,505	318,640	318,640
Under Evicted Tenants Acts and Act of 1909	177	33		89,495	89,495
Total estates purchased by Estates Commissioners	30,889	1,073	998,350	9,046,114	8,968,286
Estates purchased by the Congested Districts Board					
Out of its own funds	—	75	22,636	120,434	120,434
Under the Act of 1896	6,300	58	166,000	502,797	502,797
Under Sec. 77 of Act of 1903	1,514	33	54,510	274,926	274,926
Under Sec. 77 of Act of 1903 and Act of 1909	650	19	18,039	90,891	90,891
Under Sec. 72 and 79 of Act of 1903	13,819	245	467,400	2,627,926	2,625,503
Under Secs. 72 and 79 of Act of 1903 and Act of 1909	10,256	204	366,890	1,620,970	1,620,697
By "final offer" and compulsory purchase under Act of 1909	7,680	86	278,182	1,227,194	1,227,194
Total estates purchased by Congested Districts Board	40,224	720	73,6[illegible]	6,465,138	6,402,144
Total estates purchased		1,000		6,567,986	6,455,298

(1) Not including the purchase of land by the Congested Board

§ 3. Re-sales of estates purchased.

The total figures for re-sales, up to March 31st, 1917, of estates purchased (Table XV) are fairly complete. It is not, however, possible to give them in detail, as the Reports of the Land Commissioners and of the Estates Commissioners for 1915-16 and 1916-17 are so much more condensed than those for previous years.

In regard to the re-sale of holdings on estates purchased by the Congested Districts Board it should be noted that Table XV groups the estates according to the Act under which they were sold. The estates purchased under the Act of 1896 were partly re-sold under the Acts of 1891 and 1896, but partly under the Act of 1903. The heading " Estates re-sold under the Act of 1903 (advances by Land Commissioners) " corresponds to heading (*d*) of Table XI and includes the resales under the Act of 1903 of estates purchased under the Act of 1896, under Section 77 of the Act of 1903, and under Sections 72 and 79 of the Act of 1903.

It should also be noted that the figures for the re-sale of estates purchased by the Congested Districts Board do not include the re-sales of any holdings for which the tenant pays entirely in cash, without obtaining an advance. This does not, of course, make any difference in the amount of the advances, but slightly reduces the other figures.

All the estates purchased by the Land Commissioners under the Acts of 1881, 1885 and 1896 having been re-sold, the figures for re-sales are the same as those for purchases.

In Table XVI we give statistics of the re-sales of demesnes on estates in which sales have taken place between landlord and tenant and on estates purchased by the Estates Commissioners. These figures are, however, included in the total figures given in Tables XIII and XV. In order to give a complete statement of the demesnes re-sold, we repeat the figures given in Table XV for the re-sale of demesnes on estates purchased by the Congested Districts Board.

§ 4. Aggregate figures.

We are now in a position to give aggregate statistics up to March 31st, 1917. These, however, can be presented in two different ways, according as we wish to ascertain the total sums advanced by the various administrative bodies concerned for the purpose of converting the tenant farmer into the proprietor of his holding, or the number of tenant-farmers to whom their holdings have actually been sold.

	Number of Loans	Area in Acres	Rent (of tenanted land only)	Purchase Price	Amount of Advances	Number of Years' Purchase of Rent (tenanted land only)
Re-sales of estates purchased by the Land Commissioners						
Under the Act of 1881	405	11 260	—	63,124	45,124	—
Under the Act of 1885	2,029	61,678	33,483	537,071	531,277	17 0
Under the Acts of 1891 to 1896	1 758	50,419	25,528	456,539	447 523	17 9
Total re-sales of estates purchased by the Land Commissioners	4,192	123,357	(1) 59,011	1,056,734	1,023,924	—
Re-sales of estates purchased by the Estates Commissioners						
Under the Act of 1903	19,320	637,664	182,608	6,230,661	6,149,604	21 3
Under the Act of 1909	350	15 805	2,337	175,219	171,290	20 1
Total re-sales of estates purchased by the Estates Commissioners	19,670	653,469	184,945	6,405,900	6,320,894	—
Re-sale of holdings on estates purchased by the Congested Districts Board						
Estates re-sold under the Acts of 1891 to 1896	2,673	62,685	12,832	196,316	196,316	15 5
Estates re-sold under the Act of 1903 (Advances by Land Commissioners)	9 174	195,131	60,417	1,320,576	1,314,486	21 7
Estates re-sold under the Act of 1903 (Advances by Estates Commissioners)	19	546	421	10,971	10 971	26 0
Total re-sales of holdings on estates purchased by the Congested Districts Board	11,866	278,362	73,670	1,527,863	1,521,773	—
Re-sales of demesnes on estates purchased by the Congested Districts Board.						
On estates re-sold under the Act of 1903	14	2,609	—	38,659	35,583	
On estates re-sold under the Act of 1909	10	3,405	—	35,721	35,212	—
Total re sales of demesnes on estates purchased by the Congested Districts Board	24	6 014	—	74,380	70,795	—
Total re-sales	35,752	1,041,202	(1) 317,626	9,064,877	8,937,386	—

(1) Not including re-sales of estates purchased under the Act of 1881

TABLE XVI. — *Re-sales of Demesnes up to March 31st, 1917.*

	Number of Loans	Area in Acres	Purchase Price	Amount of Advances
			£	
On estates in which sales have taken place between landlord and tenant:				
Under the Act of 1903.	198	75,951	1,262,141	1,081,620
Under the Act of 1909.	14	3,130	43,406	41,647
Total re-sales of demesnes on estates in which sales have taken place between landlord and tenant	212	79,081	1,305,547	1,123,267
On estates purchased by the Estates Commissioners:				
Under the Act of 1903.	93	27,941	370,214	354,355
Under the Act of 1909	10	2,316	33,091	29,910
Total re-sales of demesnes on estates purchased by the Estates Commissioners	103	30,257	403,305	384,265
On estates purchased by the Congested Districts Board:				
Re-sold under the Act of 1903 .	14	2,609	38,659	35,583
Re-sold under the Act of 1909 . .	10	3,405	35,721	35,512
Total re-sales of demesnes on estates purchased by the Congested Districts Board	24	6,014	74,380	
Total re-sales of demesnes	339	115,352	1,783,232	1,578,327

In the first case, the aggregate figures will be obtained by adding together the total figures for sales between landlord and tenant to the total figures of advances for the purchase of estates. It should be noted that the number of loans shown in Table XVII represents in the case of sales between landlord and tenant the actual number of tenant-purchasers, but in the case of estates purchased it represents the estimated number of purchasers on re-sale.

TABLE XVII. — *Aggregate Statistics up to March 31st, 1917, of Advances made for purposes of Land Purchase.*

	Number of Loans	Number of Estates	Area in Acres	Purchase Price	Amount of Advances
				£	£
Sales between landlord and tenant . .	239,660	(1) 11,500	(2) 7,771,630	(3) 83,753,575	82,178,881
Estates purchased for re-sale to tenants .	(4) 75,305	2,000	2,495,382	16,567,986	16,455,298
All advances made for purposes of land purchase . . .	(4) 314,965	(1) 13,500	(2) 10,267,012	(3) 100,321,561	98,634,179

(1) Not including sales under the Acts of 1869, 1870 and 1881 — (2) Not including sales under the Act of 1869 — (3) Not including sales under the Acts of 1869 and 1870 — (4) Not including the purchase of land by the Congested Districts Board out of its own funds.

To the total amount of advances should, perhaps, be added the sums spent by the Congested Districts Board on the improvement of the estates purchased. These sums will afterwards be recovered when the estates are sold to the tenants, and may, therefore, be considered as advances for purposes of land purchase. Up to March 31st, 1917, the amount spent on improvement was £1,438,616. If this figure be included, the total amount of advances was £100,072,795.

In Table XVIII we give the statistics relating to tenant-farmers to whom their holdings have actually been sold The aggregate figures are obtained by adding the total figures for sales between landlord and tenant to the total figures for re-sales of estates purchased.

TABLE XVIII. — *Aggregate Statistics up to March 31st, 1917, of allhol dings (and demesnes) sold to the occupiers under the Land Purchase Acts.*

	Number of Loans	Area in Acres	Rent (of tenanted land only)	Purchase Price	Amount of Advances
				£	£
Sales between landlord and tenant	239,660	(1) 7,771,030	(2) 3,939,754	(2) 83,753,575	82,178,881
Re-sales of estates purchased	35,752	1,041,202	(3) 317,626	9,064,877	8,937,386
All holdings (and demesnes) sold to the occupiers	275,412	(1) 8,812,832	(4) 4,257,380	(2) 92,818,452	91,116,267

(1) Not including sales under the Act of 1869. — (2) Not including sales under the Acts of 1869 and 1870. — (3) Not including re-sales of estates purchased under the Act of 1881. — (4) Not including sales under the Acts of 1869 and 1870, nor re-sales under the Act of 1881.

The imperfection which we have noted in the case of re-sales recurs in the aggregate figures in Table XVIII. It does not, however, affect the total amount of advances.

Our figures clearly indicate the large scale upon which credit has been given in Ireland for land purchase, and the extensive areas which have already become the property of the farmers who cultivate them. The operations which they represent form the second stage of an agrarian revolution, the first stage of which consisted in making the tenant-farmer the joint owner of his holding by giving him fixity of tenure, by legally recognising his tenant-right (that is, the value of his interest in the holding) and giving him the right to sell it freely, and in establishing a special tribunal for fixing fair rents. The process is rapidly approaching completion and the day is not far distant when the tenancy system in Ireland will have entirely given place to the system of occupying ownership.

Part IV: Agricultural Economy in General

GREAT BRITAIN AND IRELAND.

THE SCOTTISH LAND COURT IN 1916 AND 1917.

OFFICIAL SOURCES:

REPORT BY THE SCOTTISH LAND COURT AS TO THEIR PROCEEDINGS UNDER THE SMALL LANDHOLDERS (SCOTLAND) ACTS 1886 TO 1911, for the year from 1st January to 31st December 1916. Edinburgh, 1917.

IDEM for the year from 1st January to 31st December 1917. Edinburgh, 1918.

In our issue for June 1917 (1) we explained the conditions of land tenure in Scotland which led to the establishment in 1911 of the Scottish Land Court, and the functions of this court, and we reviewed its work in 1915. We propose now to examine its accomplishment in 1916 and 1917.

§ 1. THE WORK OF THE COURT.

As in 1915 the court was mainly occupied by the constitution of new small holdings and the enlargement of existing holdings, the modification of rents, the fixing of the amount of compensation due to outgoing tenants, and grants of leave to assign holdings.

(a) *The Constitution and Enlargement of Small Holdings.*

In this important department of its work the court accomplished far less than in 1915, largely owing to the increasing concentration of the nation on the business of the war. As we explained in the article already cited schemes for the constitution of new holdings and for enlargements are prepared by the Board of Agriculture for Scotland and presented to the Land Court for acceptance or rejection. But in 1916 and 1917 the Board was crippled by the fact that its grants from Parliament were curtailed or suspended, and at the same time the cost of building and fencing had risen to an extent which enormously increased the expense of its undertakings. In

(1) Pages 64 to 74.

1916, for instance, the Board applied to the court for authority to form certain new holdings and enlarge certain existing holdings on the densely populated island of Lewis, a scheme which concerned the settlement of some 130 families. But later in the same year the Board successfully petitioned that all proceedings connected with this scheme might be suspended, owing to the very considerable expenditure which its realization at this time would have involved, and the difficulties due to the absence on naval or military service of an overwhelming proportion of the men of military age in the districts affected.

The expensiveness of constituting new holdings was made yet more serious by a decision in the House of Lords, as supreme court of appeal, in a lawsuit regarding the right of landlords to compensation. The House of Lords held that the Land Court or an arbiter, as the case may be, is entitled to award compensation to a landlord for any reduction in the possible selling value of his estate directly due to the establishment thereon of small holdings, even when the rental of the estate is not diminished. This indefinite liability to pay compensation to landlords for a loss of value based on sentimental grounds handicapped the formation of small holdings from 1916 onwards.

Small holdings are formed and enlarged either by a compulsory order of the court or by agreement with the landlord.

TABLE I. — *New small holdings compulsorily formed.*

County	Number		Area *						Rent fixed	
			Arable or old arable		Outrun		Common pasture			
	1916	1917	1916	1917	1916	1917	1916	1917	1916	1917
			Acres	Acres	Acres	Acres	Acres	Acres		
Argyll	16	—	1,937	179	—	849	—	—	345	155
Ayr	1	—	246						50	—
Caithness	7	—	421	—	193	—	—		207	
Inverness	7	—	203				8,672		117	
Kincardine	2	—	111						81	
Midlothian	16	—	380						411	
Orkney	—	2	—	18	—	42				10
Peebles	3	—	236	—					128	
Perth	1	2	23	7					14	6
Renfrew	2	1	79	49	—	—			64	50
Selkirk	—	12	—	424	—	297	—	109	—	343
Wigtown	11	—	611		39				406	
Total	66		4,252		232		8,672	—	1,824	565

* Roods and poles are not given except as swelling the totals.

In 1916 the court authorized the constitution by compulsory order of 36, in 1917 that of only 13 new holdings, as against 197 in 1915 At the same time schemes for the compulsory formation of 25 new holdings were withdrawn by the Board of Agriculture in 1916 as against 32 in 1915. In 1915 the number of new holdings constituted under compulsory powers of which tenants were actually registered had been 176, but in 1916 the corresponding number was 66 and in 1917 only 21 The following figures give particulars as to the holdings of which the compulsory formation was thus completed by the registration of tenants in 1916 and 1917.

In 1916 the Land Court also registered nine tenants of new holdings formed by the landlords by agreement, as follows.

TABLE II. — *New Small Holdings Formed by Agreement.*

County	Number	Area		
		Arable	Outrun	Common pasture
		acres	acres	acres
Ayr	5	165	227	—
Dumfries .	1	8	—	4,916
Inverness	2	24	105	—
Ross and Cromarty	1	13	126	-
Total	9	212	459	4,916

Nine new small holdings had thus been formed in 1915 but in 1917 no small holdings were constituted by agreement

From the time the Land Court was constituted in 1911 until 31 December 1917 it registered 393 tenants of new small holdings by compulsory powers and 235 by agreement, that is 628 altogether. In the same period it authorized the constitution of 742 new holdings, extending over 25,369 acres of arable land, 5,554 acres of outrun and 52,766 acres of common pasture. The average yearly rent fixed for each of these was £18

As regards the enlargement of existing holdings, this also proceeded much more slowly in 1916 and in 1917 than in previous years. In 1916 the court authorized the compulsory enlargement of four small holdings in the Orkney Islands by the addition of arable land and outrun, and the compulsory addition of a large area of common pasture to 55 holdings in the Shetlands. In 1917 it similarly authorized the addition of outrun and common pasture lands to 22 holdings in Argyll and Ross and Cromarty. In 1915 it had authorized the enlargement of 61 holdings. Five applications for enlargements were withdrawn by the Board of Agriculture in 1916. The enlargements formally completed in 1916 and 1917, either by compulsion or by agreement, were all in the Highlands and Islands. The following were made by agreement:

TABLE III. — *Enlargements of Holdings by Agreement Formally completed.*

County	Number		Area					
			Arable or old arable		Outrun		Common pasture	
	1916	1917	1916 acres	1917 acres	1916 acres	1917 acres	1916 acres	1917 acres
Argyll	1	1	1	4	12	7	—	135
Caithness		1	—	13	—	—	—	470
Inverness	8	6	49	61	36	68	—	9,403
Ross and Cromarty	2 *	—	1	—	2	—	820	—
Sutherland	—	1	—	3	—	2	—	3,501
Total	11	12	54	81	51	79	820	13,509

* The extent of one enlargement is not stated

From 1911 to 31 December 1917 the court authorized the enlargement of 429 holdings, the extensions comprising altogether 2886 acres of arable land, 761 acres of outrun and 31,025 acres of common pasture.

(b) *The Modification of Rents*

During 1916 and 1917 the Land Court continued its work of fixing fair rents for small holdings. This enterprise has mainly been, ever since the court's institution, one of reducing rents. A practice had arisen on many estates of raising the rent of land which had acquired an increased value in consequence of tenants' improvements. Cases have been discovered in which rents were doubled after a change of ownership, one in which they were quadrupled The Land Court's reductions of rent are generally made in obedience to the principle that no rent is to be allowed on any improvements made by the tenants or their predecessors unless payment or fair consideration for such improvements has already been received from the landlord or his predecessors Other factors considered in altering rents are the condition and value of the landlord's improvements and equipment, the insufficiency and small value or depreciation of his improvements, the quality and productiveness of the land, and the situation of the holdings with respect to markets and means of communication and transport.

It has been suggested that the higher prices received during the years of war for stock and agricultural produce would justify raised rents; but the members of the Land Court point out in their report that these higher prices have been at least partially counterbalanced by the increased cost of labour, foodstuffs, seed and fertilizers, the decreased means of transport and the less easy access to markets

We should recall, in connection with the fixing of rents, the distinction

explained in our previous article between the crofters or "landholders" who own the buildings on their small holdings and have certain rights of pasturage and the "statutory small tenants" whose landlords have paid for the buildings on their land

The following figures summarize the modifications of rent effected by the court in 1916 and 1917 as compared with previous years. The rents are usually fixed for a term of seven years It will be noticed that when the rents of statutory small tenants have been altered for the second time they have been not reduced but increased.

TABLE IV — *Modification of Rents*, 1911 *to* 1917.

	1915	1916	1917	1911-17
RENTS FIXED FOR LANDHOLDERS' HOLDINGS				
(a) *For the first time*				
No. of holdings	430	139	160	1,896
Rate of reduction . .	2·56 per cent	22 per cent	17 per cent	28 per cent
(b) *At the expiry of 7 years after first reduction*				
No. of holdings	—	301	217	1,956
Rate of reduction on first fixed rents	—	15 per cent	11 per cent.	16 per cent
RENTS FIXED FOR THE HOLDINGS OF STATUTORY SMALL TENANTS				
(a) *For the first time*				
No. of holdings .	243	112	45	930
Rate of reduction . .	20 per cent	18½ per cent	18 per cent	21½ per cent.
(b) *At the expiry of 7 years after first reduction*				
No. of holdings . .	—	12	2	14
Rate of increase . .	—	15 per cent.	2 per cent	13 per cent

(c) *Compensation for Improvements*

A landholder may, at the expiry of his tenancy, receive compensation from his landlord for all improvements suitable to his holding which have been voluntarily executed by himself or by any predecessor of his who belonged to his family, unless the landlord or his predecessor has already granted payment or fair compensation for such improvements A statutory small tenant is similarly entitled to compensation only for improvements specified in the Agricultural Holdings Act, 1908, and executed by himself after giving notice to the landlord and receiving the latter's written consent.

The compensation due to landholders is assessed by the Land Court, that due to statutory small tenants is fixed by arbitration and is therefore outside the court's competence.

Applications for compensation were granted by the Land Court as follows in 1916 and 1917:

TABLE V. — *Compensation for Improvements.*

County	No of successful claimants		Amount claimed		Amount awarded	
	1916	1917	1916	1917	1916	1917
			£	£	£	£
Aberdeen	1	—	158	—	65	—
Argyll .	—	2	—	290	—	221
Caithness .	6	4	819	676	468	355
Inverness	5	2	1,196	401	582	139
Ross and Cromarty	1	—	100	—	88	—
Sutherland	1	1	246	160	182	118
Total	14	9	2,519	1,527	1,385	833

(d) *Assignment of Small Holdings.*

Increasing advantage is taken of the power given by the Act of 1911 to a landholder whose illness, old age or infirmity disables him from working to assign his holding with the court's leave to his wife, or to the member of his family who would succeed him if he were to die intestate.

Leave thus to assign their holdings was granted within the crofting area to 61 landholders in 1914, to 44 in 1915, to 66 in 1916 and to 73 in 1917.

(e) *Conversion of Statutory Small Tenants into Landholders.*

The Act of 1911 provides for the continuance as such of landholders' holdings which become vacant. But the holdings of statutory small tenants have no guarantee of permanence saving for a clause in the same Act which forbids that they be " merged in or amalgamated with any other holding... except with the sanction of the Board ". The number of statutory tenants' holdings therefore tends to decrease as tenants renounce their tenancy or die without leaving successors, or as the holdings become vacant from other causes.

In special circumstances a man may come to hold as a landholder the land of which he was previously the statutory small tenant. The Act of 1911 rules that if a landlord, on renewing a tenancy, fail to provide the holding with buildings enabling the tenant to cultivate it in accordance with

the terms of the lease or agreement, or if he fail to maintain the buildings and permanent improvements required for the cultivation and reasonable equipment of the holding, the tenant may apply to the Land Court to have the status of landholder awarded to himself and his successors in the holding.

Statutory small tenants have taken advantage of this clause of the Act to an increasing extent. After they have made the required application to the Land Court the landlords have in some cases made good the failure imputed to them, executing repairs, building work and improvements. But most frequently the landlords have intimated that they do not wish to undertake these works and have consented to the conversion of the statutory small tenants concerned into landholders. Often it has been recognized that the tenants can, with the help of their friends, execute repairs and erect buildings at a much less cost than the landlords. When a statutory small tenant becomes a landholder the Land Court lowers his rent in consideration of the fact that he has taken upon himself the obligation to carry out building, repairs and improvements.

In 1916 twenty statutory small tenants' holdings in the counties of Aberdeen, Banff and Caithness and in the Shetland Islands became landholders' holdings; and the aggregate rent due for them was therefore reduced from £244 to £217.12s., that is by an average sum of about 26s. a holding.

§ 2. The question of game preservation.

It is a historic grievance of the Scottish peasantry that land which was cultivated by their ancestors in small holdings or used for pasturage has been converted into deer forests and grouse moors, often by persons who have no real connection with Scotland and look upon the country merely as a playground. The following figures show the area in the five northern counties — Argyll, Inverness, Ross and Cromarty, Sutherland and Caithness — occupied by deer forests or otherwise exclusively reserved for sport since 1883:

1883	1,710,000	acres
1898	2,510,000	»
1904	2,920,000	»
1912	2,932,000	»

The total area of these lands in all Scotland in 1912 was 3,600,000 acres and there also existed other deer forests partially let to farming tenants or occasionally used by the owner for grazing sheep or cattle. One deer forest formed by an alien covered 200,000 acres and stretched across Scotland from sea to sea.

In 1883-84 a royal commission recommended that the further extension of deer forests should be limited in order that small holdings might not be curtailed and the land of agricultural tenants might be protected against the depredations of deer and game. The only result was a provi-

sion in the Act of 1886 that crofters or landholders might apply for enlargements of their existing holdings from a deer forest, and that such enlargements, when granted, would give the landlord no right to compensation and entitle the sporting tenant only to a reduction of his rent for the remainder of his lease.

The Deer Forests Commission of 1892-95 reported that the following areas, which included deer forests, some grouse moors and some grazing lands of large farms, might fitly be used to form new crofters' holdings, to extend existing holdings, and to form medium-sized farms:

In Argyll	373,813	acres
In Inverness	549,598	»
In Ross and Cromarty	323,233	»
In Sutherland	395,898	»
In Caithness	86,410	»

No action was taken on this report; and, as our previous figures have shown, the process of turning agricultural and pastoral land into wilderness continued. Further, the late decision of the House of Lords with regard to the compensation payable to a landlord when small holdings are established on his land, to which we referred in the early part of this article, has put an end to the inclusion without liability to pay compensation of parts of deer forests in small holdings. Only some temporary war regulations and the recent voluntary concessions of certain landlords, notably the Duke of Sutherland, have occurred to improve the situation in that they have allowed tenants to graze their stock in deer forests.

§ 3. Suggested amendments of the small landholders' acts.

The Small Landholders' (Scotland) Acts, 1886 to 1911, which empower the Land Court, definitely limit its competence. In its report for 1916 the court earnestly recommends that these Acts be amended with a view to maintaining, if not enlarging, the class of Scottish small holders.

The following are the main reforms suggested:

(a) *Definition of Small Landholders.* — It is recommended:

(1) that the distinction between landholders and statutory small tenants be abolished, and that a statutory small tenant be declared entitled to the benefit of all provisions in the Act of 1911 for landholders, except that his tenure should continue to be based on successive renewals of tenancy to the tenant and his heirs, legatees or assigns;

(2) that the Small Landholders' Acts which have hitherto only applied to tenants of no more than 50 acres paying a rent of no more than £50 a year should, except in the Lewis, be extended at least so that they apply to tenants of 100 acres of land paying a rent of £100 a year.

(b) *Free Use of Small Holdings.* — The removal of certain restrictions on the use of their land by small holders is suggested, as follows:

(1) every tenant should have the right to practise any system of cultiva-

tion on his holding, and to use it for any purpose of husbandry, including the keeping and breeding of live stock, poultry and bees, and the growing of any produce suitable for the food of man or beast or forming the raw material of industry;

(2) every tenant should be able to dispose of the produce of his holding without incurring any forfeiture or other penalty or liability;

(3) every tenant should be entitled to use his holding, or any land of his holding or building upon it, for the purpose of any subsidiary trade, industry or occupation which is reasonable and does not interfere with cultivation;

(4) every tenant should have the right to make any improvements reasonably required for the cultivation of his land, according to the practice of good husbandry or according to the directions of the Board of Agriculture, without the consent of his landlord.

(c) *Protection against Game.* — It is recommended that every tenant have full right to kill and take on his holding any deer, game, vermin or other wild animals or birds, in so far as is necessary to the protection against damage of his land or its produce.

(d) *Security of Tenure, Rent, Compensation for Improvements.* — The court recommends that no tenant be ejected from his holding unless there be a reasonable objection to the continuance of his tenancy; that rents never be raised as a consequence of tenants' improvements; and that all outgoing tenants receive fair compensation for their improvements.

(e) *Permanency of Small Holdings.* — The report urges that it be made illegal to let any small holding which becomes vacant except to a new small holder or as the enlargement of another small holding, or to include it within a deer forest or grouse moor, without the consent of the Board of Agriculture.

(f) *Reservation of Land for Sport.* — The court states that it should not be lawful to reserve any land only for purposes of sport, unless the Board of Agriculture authorizes such reservation, on the terms it considers reasonable and on the grounds that the land in question cannot be usefully let for any purpose of cultivation.

(g) *The Constitution of New Holdings and Enlargement of Existing Holdings.* — At present the Board of Agriculture can buy land, for the purpose of forming or extending holdings, only by agreement and only in the northern counties. The Land Court suggests that the Board be empowered to make these purchases throughout Scotland, be provided with funds to do so, and be able at need to compel landlords to sell land at a price calculated on the net revenue for a fixed number of years. The purchase of Crown lands for the purpose of new holdings should be facilitated.

As regards the vexed question of compensation due to landlords who continue to own the land of small holdings, the court recommends that no compensation in any form be payable to a landlord if the land in question be exclusively or mainly reserved for the purpose of a deer forest or grouse moor or another sporting purpose, or in any case if the constitution or

enlargement of holdings do not directly entail on him a net loss of revenue from the land.

A further recommendation is that the Board of Agriculture be empowered to help tenants to stock new or enlarged holdings, either by loans or by a hire-purchase agreement, a preference being given to tenants who have served in the navy or army ; and that the Board be empowered to sell holdings situated on land it has purchased to new holders on equitable terms, making any advisable provision against mortgaging and for the payment of the price in instalments.

The members of the Land Court point out that the value to the nation of the small holders of Scotland and the danger that emigration may gradually eliminate them make the redress of their grievances an urgent matter. "They have", says the report, "by their industry, brought into cultivation and produced food from lands which large farmers would have used only for pasture. They have brought up large families, contributed sons and daughters to almost every profession and industry, and have powerfully aided in the development of our colonies and dominions. No class has more promptly, or in such proportion, or at the cost of greater sacrifices, answered the call of honour and patriotism... There is every reason to fear that, unless the Acts intended to preserve and extend small holdings are effectively reformed, at least to the extent of urgent necessary amendments, and as soon as practicable, and unless the system of law and policy which places the preservation of deer and other game above the production of food, and which permits or encourages the depopulation of the country for the pleasure of the wealthy of this and other nations, is completely reversed, this decline of population will rapidly accelerate. The younger men will in increasing numbers emigrate to the colonies which offer land on just and generous conditions, rather than continue to bear the evils and abuses which the beneficent intentions of the legislature have mitigated but as yet have failed to suppress ; or they will, as happened before the Crofters Act passed, refuse to obey land and game laws which they feel to be unjust and often cruel, and which are clearly inconsistent with the spirit of modern legislation and the national interest".

SWITZERLAND.

THE PROBLEM OF LAND SETTLEMENT IN SWITZERLAND.

SOURCE:

BERNARD (Dr. HANS), Zurich: *Die Innerkolonisation der Schweiz*, in *Zeitschrift für schweizerische Statistik Volkswirtschaft*, Year 54, Part 4, 1918.

§ 1. GENERAL CHARACTER OF THE PROBLEM.

The conception now informing land settlement in Switzerland takes into account experiences of the years of war — the lack of balance between production and consumption, and between the density of urban and rural population and housing accomodation, the latter being deficient especially in the country.

The problem is therefore, in the last analysis, that of procuring, more efficiently than in the past and for the needs of a larger number of persons, an area on which foodstuffs are grown, and that of providing for the populations who may be displaced on this area the conditions necessary to allowing them to inhabit it. These two aspects of the problem must be kept distinct — the intensification of cultivation and enlargement of the cultivated area, and the matter of housing accommodation.

We will briefly consider the problem in its two aspects.

§ 2. AREA PLANTED WITH FOODSTUFFS.

From a table on the subject published by Dr. Bernhard it is evident that the proportion of the territory of Switzerland planted with foodstuffs is one of the smallest among European countries. The number of ares so planted per single inhabitant in certain countries appears in the following table.

The factors mainly contributing to this state of affairs are undoubtedly the great industrialization of the country and its special physical and geographical conditions, Switzerland being largely mountainous. In some communes there is hardly any land adapted for cultivation: in the commune of Hinterrhein for example, in the canton of the Grisons, the cultivated area forms only 0.002 per cent. of the area reserved for rural and mountain husbandry.

The unfavourable position with regard to the growing of foodstuffs has therefore pushed Swiss farmers to attempt land settlement. Another

Countries	Area planted with foodstuffs Area		
	Wheat	Rye	Potatoes
Switzerland	1	0 4	1.5
France	16.6	3.1	3 9
Great Britain and Ireland	2	0 05	1
Germany	3	9 5	5 1
Italy	13 7	0 4	6.8
Russia	18 6	20 4	3.2
Belgium	2 1	3.4	2 6
Denmark	1.5	10	2
Austria Hungary	10 1	6 5	3 9

motive is supplied by the fact that the cultivated land has not yet been made fully productive. Vast areas of Switzerland, tens of thousands of hectares, are, from the point of view of the food-supply, no better than uncultivated although they are used for rearing stock And these very lands are largely flat and fertile and would lend themselves well to being broken up and cultivated, without any prejudice to the stock farming.

Among the uncultivated and depopulated lands the woods, which in Switzerland cover 900,000 hectares, can be numbered. From the point of view of land settlement they represent a very extensive area which might bear foodstuffs. But there is certainly a difference between tillable pasturelands and woodlands: the latter constitute a very precious element in the general economy of the country.

It is however a fact that in many places in Switzerland there are wooded areas where for evident reasons of economy there ought to be intensively cultivated land, while elsewhere, as for instance on the slopes of the mountain chains, where woods would be entirely in place, that system of small holdings prevails which is typified by farms of low economic value and difficult to cultivate.

If, on the other hand, we examine the conditions of land settlement in those parts of the cultivable territory which are already productive, we notice the inconveniences of an excessive division of the lands due to the lack of housing accomodation for the rural population, who are obliged to live in groupings which transgress every law of hygiene and economy. This state of affairs excludes much utilization of agricultural machinery, as well as the possibility of solving the problem of housing accommodation and the scientific extraction of a yield from the soil without loss of time and wealth. The same is true, with due distinctions, of a realization of the value of mountain lands. Finally, due account must

be taken of the reaction which large hydraulic works developing electric power have had on agriculture. Where they have been constructed on cultivated lands they have given rise to a far from negligible series of inconveniences and often to notable damages.

§ 3. The problem of housing accomodation.

Other defects arise out of the problem of housing accommodation. Within a comparatively brief space of time Switzerland has been transformed from an agricultural to an industrial State. Unlike the early domestic industries, which maintained the decentralization of the population, the industry of factories, which developed rapidly, united large masses of people in a few centres. It should be noticed that the distribution of the increment of population, estimated at 1,360,000, which has accrued to Switzerland since 1850, has not been at all uniform. The enlargement of certain Swiss industrial centres in the sixty years between 1850 and 1910 appears from the following data :

Industrial Centres	Number of Inhabitants	
	1850	1910
Winterthur town (without suburbs)	5,341	25,250
Zürich » »	35,406	190,733
Bienne » »	3,509	23,679
Basle » »	27,844	132,276
Geneva town and adjacent communes (without suburbs)	42,127	123,153

It is certain that the groupings of dwellings in the industrial centres arose without the important problem of provisioning and land settlement being taken into account. If a contemporaneous solution of this problem had been attempted, the industrial quarters of the large towns would have been differently planned, and important allotments of uncultivated land at a short distance from many industrial centres could have been handed over to the industrial population to be cultivated or made more intensively productive. For this it would have been necessary to build on these lands workmen's dwellings connected with the town by modern means of communication. An excellent opportunity was thus lost of obtaining an important contribution to the food-supply from a class of the population unconnected with rural economy and from more or less uncultivated lands ; and the urgent problem of providing dwelling accommodation for the industrial population remained meanwhile unsolved, and

found itself faced by perpetually increasing difficulties in inconvenient, unhygienic and overcrowded districts.

In this respect the situation of the rural population was somewhat better; but the arrangements for housing the agricultural population also gave rise to inconveniences of various kinds, as we have already observed.

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Having dealt with the defective utilization of the soil of Switzerland, considering the matter from the point of view of the cultivation of foodstuffs and of housing accommodation, we will pass to a description of the land settlement programme drawn up by Dr. Bernhard in view of the conditions we have examined.

§ 4. Settlement on uncultivated lands.

The question is above all one of settling uncultivated lands. With this object works of land improvement were undertaken with the State's aid, but no works of this kind were ever undertaken on the scale required. Some cantons subsidized land improvement quite inadequately and thus lost the financial aid of the Confederation. The canton of Schwyz throughout subsidized land improvement with amounts not exceeding 1000 francs. It is clear that results of any importance could not thus be reached. The retrogression which had taken place in agriculture then raised to an extraordinary extent the value of litter for animals, so that marshy lands often fetched higher prices than cultivated lands. The effective spur of interest was thus not present to cause works of improvement to be undertaken.

Only the deficiency of foodstuffs which became apparent during the war and the very high prices of provisions awakened in landowners a desire to improve their lands. The State also, when faced with the increasing difficulties, showed itself more interested in the matter. In the canton of Zürich some improvements were undertaken, but works on a really large scale have not yet been begun.

The other problems of land settlement are connected with the effort to promote works of land improvement. Among these problems is that of forming new settlements of peasants. There is no lack of land, especially in the districts far from towns which should be improved. Dr. Bernhard gives the exact situation of land adapted to this purpose.

There is question of an agricultural undertaking which would be useful from every point of view. Not only would there be a new acquisition of cultivated land, but these new agricultural units would, at small expense, give a larger yield than the old over-divided farms. The plain of the Rhone in Valais would be particularly adapted to the scheme. On it many independent farms, to be cultivated by machinery, and measuring

from 10 to 20 hectares each, could be formed, to the evident advantage of the class of small farming landowners.

§ 5. The transference of the agriculturists.

Another necessary part of land settlement is the transference of agriculturists from lands adapted to hydraulic or other works entailing the suppression of agriculture. Dr. Bernhard instances the Sihl Lake scheme. He states that in this and other like cases a forced expropriation of peasants, who will be indemnified in accordance with established custom, is contemplated. This proceeding is costly, and it does not solve the problem, because the peasant cannot with the sum he receives re-establish his farm elsewhere, and is in most cases obliged to emigrate which obviously involves a loss to the national economy. The best solution would be to provide for peasants of this kind the means to find in the neighbourhood a field for their activity corresponding to that they give up, as regards both its political and its economic conditions. In other words, the case is practically one for breaking up the uncultivated land in the canton of Schwyz along the Linth, in the upper part of Lake Zürich, near Rotenthurm, near Studen, and between Brunnen and Schwyz, for subdividing this land into independent modern farms, and for assigning them to the peasants of the land near Lake Sihl. There are about 1,000 hectares of land, more than sufficient for this purpose.

§ 6. Alpine and rural economy.

For the purposes of land settlement Alpine economy, a department of husbandry whence the Swiss people derive foodstuffs and live stock for exportation, has much importance. From the point of view of the tourist industry the Alpine economy of Switzerland also deserves the closest attention. The problem is one of breaking up uncultivated lands, improving farms, making roads, and forming Alpine and technical schools.

The rural population of the plain has been an object of greater attention than has the Alpine population. Land settlement desires in this sphere to co-operate in the solution of problems of general interest, of which those of the redivision of land, rural housing and the campaign against the depopulation of the country districts are among the most important.

§ 7. Gardening by the industrial population.

The most conspicuous and valuable task which Swiss land settlement is called upon to accomplish is however connected with the victualling and housing of the industrial and urban population. We must not forget that it was industrialization which in Switzerland gave birth to the

movement for land settlement. The question is one of decentralizing the non-agricultural population and bringing it into contact with the soil. How can this be done ?

Above all, by giving a new impulse to the movement to form within the circumference of towns gardens of which a quite inadequate number exist today. The Swiss statistics as to agriculture give the following as the number of square metres on which vegetables are grown per inhabitant of the urban communes :

	Square metres
Urban commune of Winterthur	32.1
» » Zurich	13.5
» Basle	14.5
» Geneva and suburbs	14.6
Lausanne	12.3
» St. Gall	3.0
Bienne	29.0
» » » La Chaux-de-Fonds	7.6

The fact should be borne in mind that before the war the areas cultivated as gardens were still smaller and that they were considerably increased in the autumn of 1917 and the spring of 1918. These increases are attested by the following trustworthy figures as to the canton of Zürich.

Communes	Area cultivated as gardens Ares	
	1917	1918
Commune of Winterthur	4,456	5,077
Uster	1,400	2,100
Rüti	1,380	1,969
Wald	1,224	1,779
Horgen	344	567
Stäfa	900	1,370
» » Affoltern near Zürich	1,926	2,573
» » Schlieren	2,131	1,819

The increased cultivation as gardens of lands within the circumference of industrial towns does not however suffice to meet the needs of the industrial poulations. The lack can be supplied only by using larger areas of uncultivated land, situated at some distance from inhabited centres, for this purpose. When this is done the scientific realization of the value of

the land by industrial firms or communal administrations is to be preferred to individual cultivation on the part of families of towndwellers or small farmers

§ 8. Industrial land settlement.

We have still to notice an important part of land settlement, the system, namely, of organizing permanent dwellings for the urban and rural populations. If the consequences of the urban agglomerations of population, and of the difficulties of victualling the large towns which arose during the war, be considered, the urgency is understood of the problem of decentralizing industrial towns, and the fact also that this should be considered one of the chief problems of land settlement. It is so all the more because, owing to the introduction into industry of the new working hours, the workman is not obliged to live in the immediate neighbourhood of his factory or other place of employment. The electrifying of railways will do away also with many of the inconveniences of travelling.

The area of towns which is built upon must not be expanded except in accordance with regulating plans.

It is necessary that in the policy of housing and of planning urban centres the principle prevail that every family not following the trade of agriculture have the use of a house of its own, and that this house, in accordance with the size, trade and means of the family inhabiting it, either have attached to it a few ares of land to be cultivated or have dependent on it a regular agricultural holding. It will not be difficult to attain to this solution in Switzerland, for most of the industrial centres have in their neighbourhood much uncultivated land which would lend itself well to being rendered productive by settlement of this kind.

In these settlements it is essential that agricultural work be done by mechanical means, and the planning and grouping of the houses must be such that the land to be cultivated can be worked in common and time and expense thus economized.

§ 9. Fulfilment of the programme of land settlement. The agencies and the work accomplished.

In the sphere of land settlement experiments of various kinds have for a long time been made in Switzerland. The Confederation and the cantons have subsidized works of improvement; the communal administrations have promoted the cultivation of gardens; industrial firms and communes have attempted to solve the problem of housing, etc. But all this represents only the beginnings of a movement. The war economy has given a new impulse to this activity and has brought a full light to bear on the whole importance of land settlement.

The evils which land settlement is called upon to cure have been determ-

ined by the industrialization of the country. It is therefore just that industry should take a leading part in improving conditions, acting in close union with other economic elements and with the State, and that industry should bear the greater burden of the work of executing the programme. An important step towards solving the problem was taken on 5 July 1918 when the Swiss Association for Industrial Agriculture was founded in Switzerland, as an institution existing in the public interest. It now comprises 150 industrial enterprises of various sizes which have united in a society in order to meet, by breaking up land and cultivating on a large scale, the working class's ever growing need for the necessities of life. These works should also give employment to workmen if the dangers of unemployment follow on the insufficient importation of raw material or occur for other reasons. The deed of foundation also contemplates the formation of resident quarters, but initiative where this is concerned has had to be postponed owing to the difficulties with which building has had to contend during the war.

As regards the practical working methods of the Swiss Association for Industrial Agriculture we will notice the organization of industrial agriculture in Winterthur.

In the first place an inventory of the marshy lands situated round about Winterthur was systematically made. These lands, most of which were communal property, were then taken on long leases (12 to 15 years) by the cantonal Office of Food-Supply of the canton of Zürich, and this office then, on the same conditions, granted them to industry in order that the land might be broken up and cultivated. They were let on long leases because works of land improvement had to be undertaken on them, and they could be fully productive and compensate the lessee for expenditure on their improvement only after a few years.

A new form of lease is exemplified, the lease for use and improvement. The lessee takes over the farm in the state in which he finds it, that is no improvements are executed on it, and he is obliged to carry out works of land improvement within the period for which he has the usufruct and in accordance with the provisions of State agencies. In such cases he naturally has the benefit of State subventions.

The lease for use and improvement is very well adapted to industrial agriculture. It facilitates the acquisition of lands for industrial farms, and national agriculture derives profit from the fact that the execution of works of improvement on a large scale is pressed.

The activity of the Swiss Association for Industrial Agriculture is in this first phase directed entirely towards land settlement. With regard also to the problem of populating the country this society can develop as regards its exterior form into a true Swiss Association of Land Settlement.

This amplification of programme would require strict collaboration with existing institutions of public utility which directly or indirectly occupy themselves with problems of land settlement. It would also necessitate a keeping in close touch with authorities in order to obtain uniformity

in the execution of measures of land settlement and in order that the whole movement might be held within the limits of a wise economy.

Dr. Bernhard states that in Switzerland an important work in the field of land settlement lies before the State. In the first place a Swiss land settlement law is necessary.

It should comprise the following main points:

1) It should ensure the greatest possible support in all cantons to every work of agriculture, especially the important works of land improvement;

2) It should similarly promote all measures referring to the population of rural districts, and should with such object improve the condition of mortgages;

3) It should facilitate the acquisition of lands, and in the first place of lands now uncultivated which lend themselves to being settled;

4) It should provide measures of gradual compulsion by which those concerned would have to collaborate in the works of public utility connected with land settlement.

When such a legal basis has been given to land settlement in Switzerland, the Association for Land Settlement will be responsible for drawing up, together with the authorities, a definite plan which will show all measures to be taken, and then for executing the work rapidly and carefully.

RUGGERI ALFREDO, gerente responsable.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall:

(*a*) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets;

(*b*) communicate the above information as soon as possible to those interested;

(*c*) indicate the wages paid for farm work;

(*d*) record new diseases of plants which may appear in any part of the world, show ing the regions infected, the progress of the diseases, and, if possible, any effective remedies;

(*e*) study questions concerning agricultuial co-operation, insurance, and credit from every point of view; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit;

(*f*) submit for the approval of the various governments, if necessary measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119 30327	yards
1 Crown (100 heller) (Austria Hungary)	=	10*d*	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	1*s.* 1 1/5*d.*	at par
1 Dediatine (2 tchetwert) (Russia)	=	2.69960	acres
1 Dinar, gold (100 para) (Serbia)	=	9 33/64*d.*	at par
1 Dollar, gold ($) (100 cents) (United States)	=	4*s.* 5/16*d.*	at par
1 Drachm, gold (100 lepta) (Greece)	=	9 33/64*d*	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1*s.* 7 53/64*d.*	at par
1 Franc (100 centimes) (France)	=	9 33/64*d.*	at apr
1 Gramme	=	0.03527	oz.
1 Hectare	=	2 47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093 613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 33/64*d.*	at par
1 Leu (100 stotinki) (Bulgaria)	=	9 33/64*d.*	at par
1 Lira (100 centesimi, (Italy)	=	9 33/64*d*	at par
1 Litre	=	0.21 998	gallons
		0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4*d*	at par
1 Mark (100 penni) (Finland)	=	9 33/64*d.*	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	2*s* 2 61/64*d*	at par
1 Milreis, gold (Portugal)	=	4*s* 5 19/64*d.*	at par
1 Peseta, gold (100 centimos) (Spain)	=	9 33/64*d.*	at par
1 Peso, gold (100 centavos) (Argentina)	=	3*s.* 11 37/64*d.*	at par
1 Pound, Turkish, gold (100 piastres) (Ottoman Empire)	=	18*s.* 0 15/64*d.*	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	2*s.* 1 3/8*d.*	at par
1 Rupee, silver (16 annas) (British India)	=	1*s.* 6*d.*	at par
1 Talari (20 piastres) (Egypt)	=	4*s.* 1 11/32*d*	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	2*s.* 0 37/64*d.*	at par
1 Zentner (Germany)	=	110.23171	lbs.

YEAR X — NUMBER 6 7 ROME, JUNE-JULY, 1919

INTERNATIONAL INSTITUTE OF AGRICULTURE

BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

UNITED STATES.

CO-OPERATION FOR THE SALE OF PRODUCE IN CALIFORNIA

SOURCE (OFFICIAL)

THIRD ANNUAL REPORT OF THE STATE MARKET DIRECTOR OF CALIFORNIA FOR THE YEAR ENDING DECEMBER 1, 1918 Sacramento, 1918

The development of co-operation for the sale of agricultural produce in California has already been described in this Review (1). Such co-operation is due in the main to the encouragement given by the State Market Commission, and the Annual Reports of the Market Director contain accounts of the working of the principal societies The particulars which are here given are taken from the Report for 1918.

§ 1 ASSOCIATIONS FOR THE SALE OF FRUIT.

Central California Berry Grower's Association. — The primary object of this society was to protect the growers of strawberries against the loss frequently incurred in marketing a commodity so highly perishable The directors of the association decided not to establish any new marketing system, but to supervise existing market facilities. All selling was done through the commission houses, but a minimum price was fixed, based upon the cost of producing strawberries and of delivering them to the markets.

As the markets of San Francisco and Oakland have not the capacity

(1) Issue of July 1918

to consume all the strawberries produced by the members at this minimum price, it was arranged that all strawberries not finding sale at this price on the open market should be diverted to a cannery at a certain hour each day, in order to avoid further loss by deterioration. Whenever there was likelihood of the market being oversupplied, a certain percentage of the crop was delivered directly to certain canners and preservers, with whom the association had arranged for such deliveries.

Under this system, the consuming public was supplied with clean, fresh stock every morning, at no material advance in cost, while the producers secured a better general average price per chest than they had previously been able to obtain and the usual glut at the height of the season was prevented.

The co-operative marketing of strawberries has proved so successful that the association has undertaken to organize the sale of other varieties of small fruit.

California Pear Growers' Association. — This association was formed in 1917 with the primary object of marketing the canning pears grown by its members. It was not, however, until the harvest period of 1918 that it was able to handle the crop.

The results of the first year's operations were most satisfactory. In 1917, when there was no organization, growers who sold to a cannery received from $25 to $40 a ton, a price which in many cases meant a loss instead of a profit. The costs of production were, moreover, increasing, and the association, after an investigation, estimated that prices of $70 a ton on No. 1 pears and $35 a ton on No. 2 pears were necessary in 1918 to ensure a profit on well managed orchards.

It was found that there were about 6,000 tons of pears under long-term contracts, and the association held a conference with a committee of canners, as a result of which the canners agreed to advance the 1918 price $10 a ton. Besides the pears affected by these contracts, the association had an equal quantity for sale to canneries. At first the canners hesitated to purchase at the association's price, but by the end of July orders had been booked for every ton at its disposal, and it could have sold a considerably larger quantity had it been available. The total gain to the growers, as compared with 1917 prices, is calculated at $228,619.

§ 2. Associations for the Sale of Dried Fruit.

California Peach Growers. — No association in California has rendered more striking services to its members than the California Peach Growers. Prior to its organization the price of dried peaches had fallen to about 3 cents a pound, whereas the cost of production was about 5 cents a pound. The association was formed in time to handle the dried peach crop for 1916, and it was able to secure for the grower an average price of 6 cents a pound. For the season 1917-18 the grower received through the association a further increase in price, the average price being 8.32 cents per pound.

This price was received despite the largest dried peach crop in the history of the State. Out of the 40,000 tons produced during the season the association sold 32,000 tons, or 75 per cent.

The association has done much to improve the methods of harvesting and curing the fruit. It has also developed a process for peeling peaches at a nominal cost, which makes it possible to put on the market peeled dried peaches at substantially the same price formerly charged for the much less attractive unpeeled peaches.

Economies have also been effected in packing materials. Mountain timber land was purchased, and a saw mill and a box factory were built.

At the end of two years' operations the association has to its credit in capital and surplus $1,062,344.

California Prune and Apricot Growers -- After handling about $9,000,000 worth of prunes in its first season (1917), the California Prune and Apricot Growers had a set-back in 1918 owing to the partial failure of the crop. It began, however, to undertake the sale of apricots and after entering into contracts assuring a fair market, was able to offer the growers an apricot contract, guaranteeing them an initial payment in excess of prices paid at any time during the previous season, and further payments bringing the price up to about $40 per ton. During the season of 1917 the growers received in no instance more than $30 per ton and in many cases much less.

In one of its recently purchased packing houses the association has erected a plant for the extraction of kernels. In another, it is manufacturing small apricots into jam. It has also made a start in the canning of dried fruit products, especially prunes.

The association now numbers more than 6,000 members and has a paid-up capital of over a million dollars.

§ 3. Associations for the Sale of Eggs.

The Poultry Producers of Central California. — Beginning business in February 1917 with a capital of $ 10,000, this association had at the end of twenty months' business a paid-up capital of $144,000. In the first eight months of 1918 its sales amounted to $2,599,152, an increase of nearly 100 per cent. over the corresponding period of the previous year.

Owing to the smallness of its initial capital and to its lack of experience, the association adopted for its first year's business the comparatively simple plan of entering into a contract with 26 San Francisco wholesale produce merchants to take the entire output of eggs from the association at the daily prices quoted in the Produce Exchange. It was further agreed that the association should be admitted to membership of the Exchange, with a representative who should have full privileges, as a protection against the manipulation of prices.

The system had the disadvantage that the highest prices the association could hope to obtain were the Produce Exchange prices, and it was

easy for produce merchants unfriendly to the association to offer a slightly better price than could be obtained through the association. A certain number of the poultrymen who had contracted to sell all their eggs to the association broke their contracts and had to be brought into court to compel them to fulfil their obligations.

At the end of the first year, it was decided that the association was in a position, by virtue of its increased capital and its broadened experience, to do its own selling and to develop its own retail, shipping and export business. Although some mistakes were made, the results were satisfactory. In January 1918 only 2 per cent. of the output was sold to retail traders, but by the month of August the proportion so sold had increased to 20 per cent. and the shipments to outside trade amounted to 25 per cent of the output. In the first six months of 1918, the eggs sold by the Association amounted to 39 per cent. of the eggs sold on the San Francisco market

The increased capital of the association made it possible to undertake to store eggs during the flush season instead of forcing them on the market to be sold at low prices. Over $ 250,000 worth of eggs were stored in 1918 and the financial position of the association was such that it was able to pay its members the full current market value in cash for such eggs. The members were not, therefore, obliged to wait for part or all of their returns until the eggs were sold.

In the 34 weeks ending 25 September 1918 the association handled 212,097 cases of eggs for which a total sum of $2,603,488 was received. The cost of working was 2.1 per cent. of the sales.

The Poultry Producers of Southern California. — This association, which was organized in the latter part of 1916, began with an even smaller capital than the Poultry Producers of Central California, but it started at once to do direct marketing with the trade generally. It had to face the keen opposition of the Los Angeles produce merchants, who, by employing the same tactics as those of San Francisco, induced some of the members to break their contracts with the association. Test cases were brought into court and for the defence it was contended that the association was in the nature of a monopoly. This contention was not upheld by the judge, who in delivering judgment said, " I am satisfied that the purpose for which the corporation was formed was not to create a monopoly but to stabilize the production of eggs for the purpose of serving the public and in the interests of both the consumer and the producer. "

This decision had a wholesome effect in settling issues vital not only to the Poultry Producers of Southern California but to every co-operative association in California as well. From the day the decision was rendered the association has made steady progress.

At the direction of the association some extremely valuable charts have been prepared showing the cost of egg production in southern California for a series of years.

§ 4. Associations for the sale of dairy produce.

Associated Dairymen of California. — With one exception all the large co-operative dairy associations of California belong to the federation formed in 1917 under the name of the Associated Dairymen of California, Inc. While the local associations undertake the manufacturing of the products, and also market milk and sweet cream produced by their members, the Associated Dairymen of California markets the manufactured products, such as butter, cheese, casein, sugar of milk, evaporated milk, condensed skim milk, powdered milk, etc. The Associated Dairymen will also do collective buying for the local associations.

Northern California Milk Producers' Association. — Organized in 1917, this association covers eighteen counties in the North of California, and has between 900 and 1,000 members. It is not yet active all over the territory, but is extending its work in the different districts as fast as arrangements can be completed. Its first work was to market whole milk and it was able to return to the dairymen 30 cents per gallon for milk delivered in the city, as compared with the 10 cents which they had previously obtained. The Orland Creamery, a farmers' co-operative creamery, has been acquired and considerably enlarged. In Sacramento a large plant is being constructed which will be used for the handling of whole milk and sweet cream and the manufacture of butter, cheese and other products.

Milk Producers of Central California. — This association covers five counties in Central California and the number of cows owned by its members numbers approximately 26,000. It furnishes the greater part of the milk supply of Stockton, Oakland and other Bay cities. At the time the Report was written it was manufacturing about 96,500 pounds of butter daily at two creameries which it had purchased. It has also entered into contracts for the construction of a large milk sugar factory, capable of dealing with 150,000 pounds of milk per day.

Though paying the members a higher price for milk than they had previously obtained the Association has been able to set aside large sums to pay off the indebtedness on its manufacturing plants. It is anticipated that within a year or two the Association will own buildings and plant to the value of $250,000, free of encumbrances.

Associated Milk Producers. — Organized in 1916, this association has gradually increased its business and now furnishes approximately 95 per cent. of the milk distributed in San Francisco. It numbers about 200 members. Only milk-producers are admitted and each member must furnish at least 10 gallons of milk daily.

The association has contracted with the milk distributors in San Francisco to furnish each of them with the milk he requires for his customers. The members receive a uniform price for their milk. From 1 January to 31 March 1918 the price was 28 cents per gallon : from 1 April to 31 August, 25 cents : from 1 September, 31 cents.

On each gallon of milk which it handles the Association receives 1 ¼

cents. In return for this, it sees that the members' milk gets to the purchaser in good condition ; that it is properly tested to ascertain its correct butterfat content and to ensure that it is not above the required acidity. It also collects the accounts of the milk sold. Further, it employs inspectors to visit the dairies of the members and to see whether they are in proper sanitary conditions.

The association is contemplating the establishment of a co-operative buying department for the benefit of its members and the construction of a milk product plant.

Milk Producers' Association of San Diego County. — Formed in 1917, this association has already been a pronounced success. It is not affiliated to the Associated Dairymen of California, but contemplates becoming so. On 30 June 1918, when its first working year closed, the members numbered 66. Not only had the association secured to its members a considerably increased price, but the quality of milk supply had been substantially improved.

§ 4. Miscellaneous marketing associations.

California Tomato Growers' Association. — The tomato-growers of California failed to realize in 1917 more than $10 per ton and this price was so far below the cost of production that they suffered a loss of from $10 to $30 per acre. In January 1918 the canneries only offered $12.50 per ton delivered at the factories. As the cost of production had risen this price would have meant bankruptcy. A campaign to form a tomato growers' association was started and an association with 1,200 members was quickly established.

While the association was being organized an order was issued by the United States Food Administration stating that the Army and Navy would not accept bids from any cannery where the price of the raw tomatoes was more than $15 per ton. The packers claimed that this fixed a maximum price, and refused to give more than $15. The Association, however, succeeded in obtaining from the Food Administration a statement that they were not attempting to fix the prices to the producer.

With this difficulty set aside, the directors of the association made an investigation into the cost of producing tomatoes and ascertained that the cost for the 1918 season was about $15 dollars per ton. They accordingly calculated as a fair price to the grower $18 per ton and at this figure the whole of the output of the association was sold.

As it turned out, their estimate of the cost of production was under the mark, for in parts of the State hundreds of acres of tomatoes never matured owing to drought and in other parts a deluge of rain spoiled thousands of tons and for many days prevented the picking of what remained.

The association had to contend with the antagonism of the large packers, who offered members higher prices to induce them to break their contracts, but notwithstanding this opposition, the membership has steadily increased.

California Associated Olive Growers. — While this association, which was formed in 1916, has had to face many difficulties, it has steadily increased in membership. It built two large and modern processing plants, but owing to the heavy costs involved in processing, canning and marketing the finished product, it was found that the initial membership fee had been fixed at too low a figure, and it was decided to raise it from $30 to $60 per acre. The financial strength of the association was by this means considerably increased.

Owing to the failure of foreign importations there is a considerable opening for olives of the Greek or Italian type and the association has decided that for the present it will not process and can its own fruit. It has contracted for the sale of its entire output in the raw state for a period of two years for processing by dry salt methods. The two plants built by the association have been leased to the purchasers of the crop to provide facilities for processing the fruit.

Pacific Rice Growers' Association. — When this association was formed in 1915 the market conditions in California for rice were very unsatisfactory to the grower. At first the association was not able to effect much improvement but it was reorganized and greatly enlarged in 1916. The results have since been such that rice-growing has again become a profitable industry.

In 1916 the association entered into a contract with the Lake Charles Milling Company of Lake Charles (Louisiana) to ship 200,000 bags at prices ranging from $ 2.40 to $ 3.40 per hundred pounds for No. 1 grade to the grower. In 1917 it shipped 500,000 bags to the same company at prices ranging from $ 3.75 to $ 5.00. For the 1918 crop the association contracted with the Food Administration to dispose of the entire output at a price of $ 4.32 for varieties graded No. 1 and No. 2.

The association charges the producer a commission of 5 cents per bag, but in 1917 it was able to give its members a rebate of 1 ½ cents per bag and to carry forward 1 ¼ cents per bag for the next year's working.

Alfalfa Growers of California. — No product in California has been subject to such severe fluctuations in price as alfalfa, which has often ranged from $ 8 per ton, baled, to $ 30 per ton and even higher.

"Alfalfa," says the Report of the State Market Director, "is a crop which requires continual attention. It also produces many crops during the year all of which must be harvested at considerable cost. The grower as a consequence must have money to finance his operations. As the crop is bulky and requires considerable space for warehousing, it is often impossible for the grower to get his hay under cover, and at times he is subjected to severe loss from the elements. At the same time, warehousing, like the marketing of alfalfa, is expensive to the grower. Like others, he must have money to continue. As a matter of fact, conditions have been such during the last few years that the alfalfa grower has been forced to sell against himself, that is, sell his hay early in the season when prices are lowest, when if he could have stored his hay, he would have received the full benefit of his efforts in higher returns on a later rising market. With

many of the growers dumping their hay on the market in the early part of the season, the effect has been to still further depress the market, not infrequently below the cost of production. Alfalfa growers are thus confronted with difficult problems of financing. Speculative buyers are, as a rule, quick to see the opportunity and purchase during the flush part of the season at the lowest rates. They are also able to hold their purchases in warehouses, thus reaping the benefit of the fat price during the lean part of the year. The farmer as a rule derives no benefit from the resultant high prices."

It was to remedy this state of affairs, which had resulted in a demoralized industry, that the California Alfalfa Growers' Association was formed in 1917, with headquarters at Riverside. This association had some success in stabilizing the market for alfalfa, but it only operated in the southern part of the State and it was decided in 1918 to form an association covering the whole of the State.

Such an association was established under the name of the Alfalfa Growers of California and by the end of the year it controlled over 30,000 acres of alfalfa. The headquarters are at Los Angeles and sales offices are being opened at San Francisco and other points. Besides selling alfalfa direct to the consumer, the association will make advances to its members whose hay is to be stored for later markets and will build warehouses in central districts, where possible, for holding the hay. It will also purchase equipment and supplies at wholesale prices for its members.

California Bean Growers' Association. — Of late years the production of beans has increased rapidly in California, a normal output of from three to five million bags having been reached. With the call for added production the acreage planted was still further increased in 1917 and 1918. It became essential, therefore, to protect the bean growers from the usual depression consequent upon a heavy production and an unorganized industry. The cost of production was increasing and bags were becoming scarce and steadily rising in price.

The California Bean Growers' Association was formed in 1917 and by September 1918 it had members whose aggregate output amounted to over 1,000,000 bags of beans. A portion of the members' beans was marketed in 1918 at fair prices.

Amongst other outlets, the association sold considerable quantities direct to the Norwegian Government.

Some difficulties were experienced in establishing warehouse facilities, but these were overcome and there are now nineteen warehouses available for members. Arrangements have also been made whereby all beans turned over to the association are immediately insured. A material saving has also been effected in the cost of sacks, which the association purchases for its members.

California Honey Producers' Exchange. — This organization, which is of the nature of a federation, has been formed to market the honey and other bee products of members and to purchase the necessary supplies for them. It only began business late in 1918.

Affiliated to the State organization are ten local exchanges in different districts. These exchanges have no share capital, but each member pays so much for every colony of bees which he owns and a percentage of the money obtained for his produce. Each of the local exchanges elects two members to represent it on the State exchange.

§ 5. The federation of farmers' co-operative marketing associations.

In our previous article we referred to the formation of the California Federation of Farmers' Co-operative Marketing Associations, and described its aims. In addition to the nine affiliated associations of which we gave a list, four other large associations have since become members. These are the California Honey Producers' Co-operative Exchange, the California Pear Growers' Association, the Alfalfa Growers of California and the Mutual Orange Distributors.

The Federation hopes to take advantage of the greatly enlarged mercantile marine which is under construction in the United States to develop a considerable trade with foreign countries and (by the Panama Canal) to the Atlantic seaboard. It proposes to charter entire vessels, loading them with the products of the affiliated associations.

NORWAY

AGRICULTURAL CO-OPERATION IN NORWAY.

SOURCES:

Beretning om det kgl. Selskap for Norges Vels og dets underavdelingers virksomhet i aaret 1916. — Samvirkeforetagender i Norge, 1915, av Hans Overaae (*Report on the Work of the Royal Society for the Welfare of Norway and of its Sections in 1916. Co-operative Enterprise in Norway in 1915, by Hans Overaae*). — Cristiania, O. Fredr. Arnesens bok-&-akidenstrykkerei, 1917.

Det kgl. Selskap for Norges Vels Samvirkvalget-Samvirkeforetagender i Norge, Samvirkede fortagender i Norge 1916 og 1917, av Hans Overaae (*Co-operation Committee of the Royal Society for the Welfare of Norway. Co-operative Enterprise in Norway in 1916 and 1917, by Hans Overaae*). — Cristiania, Gröndahl & Söns boktrykkerei, 1919.

§ 1. Introduction.

We have on other occasions dealt in this review (1) with the considerable development to which the co-operative movement in Norway has attained since the beginning of the century, and we have studied its manifesta-

(1) See our issues for June 1915, page 23; August 1916, page 16; July 1917, page 25.

tions and its results. While for the interior organization and the initial development of the various types of society we refer the reader to our previous articles, we propose here to follow the progress these types of society have made in recent years, taking as our guide the data published by the excellent Royal Society for the Welfare of Norway (*Kgl. Selskap for Norges Vels*) which has long and fervently upheld the cause of agricultural co-operation.

Before we pass to a particular examination of the various branches of co-operative activity, we think it well to give some general data which may serve to show in some cases the importance to which the movement has attained, in others its late rapid development. It should be remembered that the figures we give are only approximate for all existing societies have not supplied information. Moreover the figures for the various years cannot be wholly compared, and the absence of certain data prevents an exact comparison of the totals for the various years. However, the following tables supply a sure index to the increase of Norwegian co-operation.

TABLE I. — *Number and Membership of Co-operative Societies.*

Kind of Society	1912-13	1917	
	Number of societies	Number of societies	Membership
Dairy and cheesemaking	660	(1) 616	
Collective sale of butter	37	(1) 21	986
Co-operative slaughtering	2	4	12,883
Consortia affiliated to federations for purchase in common	1,344	1,889	60,000
Exportation of butter	6	(2) 12	—
Sale of eggs	31	40	(3) 1,403
Sale of timber	73	(1) 80	—
General collective selling	3	4	10,400
Co-operative consumption	370	636	(4) 122,007
Total	2,526	3,304	207,769

(1) Data for 1916. — (2) Partly inactive. — (3) Data for 18 societies. — (4) Data for 574 societies.

The figures speak for themselves and many comments are not needed We will limit ourselves to the observation that about one twelfth of the population is today interested in the co-operative movement in one form or another, and that the development of the sum of the business done, which has been so rapid in recent years, is proof of the movement's vitality. The war has arrested the activity of societies of some kinds and lessened their size, especially societies which work for the export trade, but it has, on

TABLE II — *Business of the Co-operative Societies* 1913-1917 (in thousands of crowns).

Kind of society	1913	1914	1915	1916	1917
Dairy and cheesemaking	26,000	25,038	29,765	43 8,0	(1) 43 8,0
Collective sale of butter	1 444	900	902	192	—
Co-operative slaughtering	—	3,002	4 888	5 937	9 047
Federations for purchase in common	11,139	18,800	19,50,	23,590	42,495
Exportation of butter	—	26	27	16	—
Sale of eggs	256	92	435	466	5-0
Sale of timber	2,824	3,142	2,019	5 521	16,445
General collective selling	1,219	2,040	2,012	3 421	5 001
Union of Co-operative Societies of Norway	2 437	3,097	4,458	6,021	8,332
Total	45 310	50,437	69,000	88,0-1	12- -2(
Co-operative consumption	—	—	—	(2) 72,065	(2) 10,,0,-
General total	—	—	—	161,039	2,3 357

(1) The data of 1917 not being known those of 1916 are repeated — (2) Approximate estimate-

the other hand, been a particular stimulus to the activity of other societies the federations for purchase in common and the co-operative consumers' societies have in particular, had occasion to intensify their work

Having made these premisses, we will pass to the individual examination of the various groups of societies, namely (1) the co-operative producing and selling societies, (2) the farmers' federations for purchase in common, (3) the farmers' co-operative selling societies, (4) the co-operative consumers' societies among which the Union of the Co-operative Societies of Norway is included

§ 2. CO-OPERATIVE PRODUCING AND SELLING SOCIETIES.

This group of co-operative societies comprises associations of three different kinds — dairy and cheesemaking societies, co-operative butter-selling societies and co-operative slaughterhouses.

(*a*) *Dairy and Cheesemaking Societies.* — These societies had, as is known, a considerable development in Norway in the last decades of the nineteenth century and have since kept an important place among the country's co-operative organizations Their number rose from 7 in 1865 to 39 in

1875, 186 in 1885, 469 in 1895 and 734 in 1900 In 1901 there were 618 of them. The data for 1915 show a decline in numbers, the total then being 569 dairy and cheesemaking societies. But in that year the total production was of 227,669,509 kilogrammes worth 29,299,360 crowns, a result very slightly below that to which the 618 co-operative dairies and 120 private dairies attained in 1910, this latter quantity being 238,689,000 kilogrammes. In 1916 the number of dairy and cheesemaking societies was 616, of which 425 sold whole milk and 191 made butter. It should however be remembered that this figures includes, to an extent that cannot be precisely stated, private dairies. The total production of the year was of 238,189,400 kilogrammes of butter worth 43 829,600 crowns. As can easily be seen when this last figure is compared with the corresponding figure for 1915, the price of milk per unit of measure had considerably increased. The data for 1917 are still lacking.

(*b*) *Co-operative Butter-Selling Societies.* — These organizations are much akin to the preceding, and have developed in those parts of Norway in which, especially on account of distances and difficulties of transport, it would be difficult regularly to get together the quantity of milk necessary to the normal working of a cheese-factory. The task of these societies is simply to collect in a special place the butter produced by the single members, and to subject it to a process by which a homogeneous mass of butter of one quality is obtained in which condition it is marketed more easily and on better terms. The particular character of these societies explains the fact that most of them are found in the province of Tromsö. There are also some in the province of Nordland, and others elsewhere in the northern part of the country. In 1916 data were furnished by 21 of these societies which had 986 members and produced 65,020 kilogrammes of butter worth 191,538 crowns.

(*c*) *Co-operative Slaughterhouses.* — The organization of co-operative slaughterhouses, which was attempted in Norway, on the model of what had been done in Denmark, from 1880 onwards, finally, in recent years and after a series of failures, attained to strength and development. There were four of these slaughterhouses in 1917, the *Hamar Slagteri*, the *Faelleslagteriet*, the *Andelsslagteriet* and the *Samslagteriet*.

The *Hamar Slagteri*, constituted in 1904, is the oldest of the group. Its membership was 401 on 31 August 1916. The following figures show its activity and the financial results to which it attained in the two last years as to which we have data :

		1914-15	1915-16
Animals slaughtered	No.	4,346	2,944
namely : pigs	»	2,040	1,041
cattle	»	1,139	910
sheep	»	374	284
calves	»	732	612
horses	»	61	97
Total weight of slaughtered animals	kilog.	335,096	236,891
Total value of slaughtered animals	crowns	351,897	348,924
Net profit	»	10,162	14,769

The *Faellesslagteriet*, constituted in 1911, of which the activity has continually been on the increase, is more important. Its initial membership of 5,041 with about 30,000 heads of cattle, had passed to 5,815 with 53,593 heads of cattle in March 1913, and the corresponding figures were 7,560 and 69,654 on 31 December 1915, and 8,307 and 78,501 on 31 December 1917. The figures referring to the animals slaughtered in the last three years are the following:

		1915	1916	1917
Animals slaughtered	No.	28,696	19,948	26,807
namely: cattle	»	12,529	7,291	9,592
calves	»	6,473	6,007	7,331
horses	»	558	459	450
pigs	»	7,340	4,600	6,954
sheep	»	1,796	1,591	2,480

The increase in the society's total business is particularly great, having risen from 1,814,881 crowns in the first year of business to 6,968,699 crowns in 1917. The rise in price has however certainly contributed to this increase. From 1915 to 1917 the development was as follows:

		1915	1016	1917
Total business	crowns	4,536,341	4,958,554	6,968,699
namely: sucking calves	»	8,035	10,876	33,793
live animals	»	81,311	136,381	146,910
products	»	4,446,995	4,811,297	6,787,996

The year 1917 showed a gross profit of 624,954 crowns and an expenditure of 469,550 crowns; 100,000 crowns were paid into the reserve. On 31 December 1917 the capital amounted to 557,651 crowns.

The *Andelsslagteriet i Skien* arose in 1916. In 1914 the *Landbrukslag* of the province of Bratsberg had appointed a commission to investigate the advisablity of instituting a co-operative slaughterhouse in Skien. The outbreak of war caused a certain nervousness in the country, and the work of the commission was for the time suspended. No sooner had the situation become clear than the enquiries were resumed with renewed energy, and the result was that on all sides complaints arose as to the situation with regard to slaughtering. As things were, it would have been impossible to go forward; had the producers not been successful in taking into their own hands the handling and sale of meat, production would have been compromised. All factors were favourable to the constitution of co-operative societies. When some difficulties as to the technical preparation of the organization had been overcome all was arranged, and the *Landbrukslag* could summon a meeting of the farmers of the various parts of the province on 10 November 1915: 110 of the farmers who were present at the meeting engaged themselves forthwith. On 21 December 1915 the constituent meeting was held, and at this meeting 719

persons, having 6,163 head of cattle and guaranteeing a guarantee-capital of 123,280 crowns (20 crowns a head), were enrolled as members.

On 1 June 1916, when the *Andelsslagteriet* first became active, the members numbered 1,044 and had 5,693 head of cattle, and the corresponding figures were 1,095 and 6,010 on 31 December 1916, and 1,330 and 8,012 on 31 December 1917. During 1917 there were slaughtered 1,927 head of cattle, 2,362 calves, 1,093 pigs, 690 sheep and 141 horses, or 6,213 animals altogether. Business amounted to 1,573,478 crowns, as against 529,459 crowns in the seven preceding months; gross profits were 155,468 crowns; the total expenditure was 136,195 crowns; and net profits were 19,273 crowns.

The *Samslagteriet i Kristianssand* is of very recent foundation, having first become active only on 15 June 1917. It was formed on the initiative of the *Norsk Landmandsforbund*. On 31 December 1917 it had 2,845 members with 12,877 head of cattle, which represented an increase of 600 members and 1,877 head of cattle since it first became active. The following are the data for the period from 15 June to 31 December. Animals slaughtered: 826 head of cattle, 38 horses, 227 pigs, 1,199 sheep and 132 calves, of the total valne of 380,446 crowns. Business — 504,710 crowns; gross profits — 90,384 crowns; expenditure — 49,816 crowns.

§ 3. Agricultural federations for purchase in common.

There are six large federations in which all the smaller local associations scattered about the country are grouped.

The following figures give a general idea of the importance and development to which the federations have attained even in the years of war, in which the situation of the world's markets has caused them not a few difficulties.

		31 December 1915	31 December 1917
Federated associations	No.	1,494	1,889
Members	»	52,200	60,000
Business	crowns	19,503,254	43,995,013
Gross profits	»	—	3,204,484
Expenditure	»	—	1,748,948
Net profits	»	306,722	795,321
Reserve	»	1,495,922	2,737,840
Stocks of goods	»	—	6,216,245

If it be remembered that the business of these organizations amounted in 1896-17 to only 243,609 crowns and was still only 9,771,143 crowns in 1912-13, a clear idea is obtained of the great and continuous growth of the agricultural federations for purchase in common, and of the ceaselessly extending part they take in supplying Norwegian farmers with requisites. The usefulness of their function, in that they can provide articles of good quality at reasonable prices to the whole country, even to districts which private trade had not means to penetrate, and their excellent technical organization, explain their constant success.

The fact is noteworthy that, on the invitation of the Society for the

Welfare of Norway, a meeting was held of the directors of the various federations, in order to study the advisability of increasing the extent to which these organizations work together, especially as regards the acquisition of goods in common. The advantages which would thus be obtained were unanimously recognized, and a committee was formed to deal with the details of an agreement. But in view of the present situation and the uncertainty of the future the committee decided to postpone any definite decision to a more propitious moment.

In the meanwhile an agreement was made among the various federations that they would take a certain number of the shares of the Bjoelvefossen Society, on the understanding that this society's production of nitrogenous manures, constituted according to the fixed rules, would meet the need for this requisite.

Having premissed so much, we will pass to an examination of the work of each individual federation, mentioning them in their order of importance :

(1) The *Landhusholdningsselskapernes Faelleskjöp* (Co-operative Purchasing Agency of the Society of Rural Economy) has its headquarters in Cristiania ;

(2) The *Faellesjorretningen* (Society for Purchases in Common) has its headquarters in Trondhjem ;

(3) The *Agder Faelleskjöpsforening* (Agder Co-operative Purchasing Society) has its headquarters in Kristiansand ;

(4) The *Stavanger amts landhusholdingsselskaps Faellesindkjöpsforening* (Co-operative Purchasing Society of the Rural Economy Society of the District of Stavanger) has its headquarters in Stavanger ;

(5) The *Vestlandsche kjöpelag* (The Vestland Co-operative Purchasing Society) has its headquarters in Bergen ;

(6) The *Romsdals amts Faelleskjöp* (The Romsdal District Society for Purchases in Common) has its headquarters in Molde.

(*a*) The *Landhusholdningsselskapernes Faelleskjöp*. — This is by far the most important organization of its kind. It had 752 sections on 31 December 1915, 798 on 31 December 1916, 859 on 31 December 1917 ; and its membership was 24,950, 26,646 and 28,854 on these respective dates. Its business rose from 13,133,865 crowns in 1915 to 16,818,275 crowns in 1916 and 22,377,998 crowns in 1917. The goods in which it chiefly dealt were fodder and chemical manures, of which it handled the following quantities :

	1915 — tons	1916 — tons	1917 — tons
Fodder	39,059	51,688	34,924
Chemical manures . . .	21,093	19,398	34,243

Besides these articles the society provides seeds and all the requisites of agriculture, as well as flour and meal, petrol, benzine and cement.

The society has a special machinery section which has had to struggle against many difficulties, especially those due to the strenuous oppo-

sition of the trusts, but nevertheless its sales increased by 50 per cent. in 1917. It is true that the rise in the prices of the goods sold contributed to this increase, but the section succeeded in supplying agricultural machinery and implements at prices much lower than the maxima fixed by the government. It now intends to develop this branch of its work further, and, beyond ensuring a good type of article at a reasonable price, to contribute to the manufacture of machinery and implements adapted to the soil of the country. It has therefore acquired the *Globus* factory, of which it took possession on 1 January 1918, and the *Gjikestöreperi og mekaniske verksted* of which it took possession on 1 June 1919. It also supplies special articles produced by eight or ten other Norwegian factories.

The mill which the society works near Kambo yielded sufficiently satisfactory results in 1917 in spite of adverse climatic conditions, and hopes are entertained of its work in normal conditions. It serves especially to mill the grain supplied by the State.

The society's warehousing section deserves, finally, a special mention. Its business reached 9,200,000 crowns in 1916 and 17,770,945 crowns in 1917.

The society's reserve fund, which was 683,608 crowns in 1913-14, rose to 1,166,916 crowns in 1915, 1,496,619 crowns in 1916 and 1,834,789 crowns in 1917.

(*b*) *The Faellesforretningen* had, on 30 June 1916, 299 sections and about 30,000 members. Its business reached 2,939,975 crowns in the year from 30 June 1915 to 1 July 1916, 10,633,606 crowns in the eighteen months from 1 July 1916 to 31 December 1917; the net profits in these periods were 30,000 crowns and 301,144 crowns, respectively; the reserve fund which was 111,758 crowns on 1 July 1916 was 227,243 crowns on 31 December 1917. The society's work consisted largely in supplying artificial manures and fodder; in 1915-16, the last year for which we have data, it sold 5,157 tons of artificial manure and 4,862 tons of fodder.

(*c*) *The Agder Faelleskjöpsforening* has had a very marked development in recent years. The number of its sections increased from 57 on 31 December 1915 to 71 on 31 December 1916, but had fallen to 44 on 31 December 1917. The membership however increased from 2,000 to 4,461; and the amount of business increased from 384,466 crowns to 857,562 crowns between 1915 and 1916 and was 3,700,000 crowns in 1917. Net profits were 66,145 crowns in 1917 as against 29,123 crowns in 1916. The reserve fund, which was 29,153 crowns on 31 December 1916, amounted on 31 December 1917 to 95,289 crowns. In 1915 the amount of artificial manures sold was 1,382 tons, that of fodder 921 tons.

(*d*) *The Stavager amts Landhusholdingsselskaps Faelleindkjöpsforening* — This federation used to begin its business year on 1 July but followed the solar year in 1917. The number of its sections increased from 151 in 1915 to 171 in 1917, its membership from 5,250 to 8,500. Business amounted to 1,741,525 crowns in 1915-16 and to 3,707,389 crowns in 1917. Net profits were 25,576 crowns and 198,003 crowns in these respective years

and the reserve fund was 103,297 crowns and 216,877 crowns. The sale of artificial manures increased from 2,870 tons in 1915-16 to 3,641 crowns in 1917; the sale of fodder from 5,358 tons to 6,513 tons.

(*e*) *The Vestlandske Kjöpelag* had 235 sections and about 7,000 members on 30 June 1916. Although 151 sections of the province of Romsdal seceded in December 1915, the business rose from 1,303,445 crowns in 1915-16 to 2,182,480 crowns in 1916-17; net profits from 28,979 to 59,243 crowns; and the reserve fund (on 30 June) from 111,952 to 171,195 crowns. The quantity of chemical manures sold in 1915-16 was 2,788 tons, that of fodder 3,567 tons.

(*f*) *The Romsdals amts Faelleskjöp* is a recently formed federation which arose in consequence of the secession of the Romsdal province sections from the *Vestlandske kjöpelag*. As early as the autumn of 1915 the new association was registered, in accordance with a resolution of the general meeting of 19 October 1914 of the *Landhusholdingsselskap* of Romsdal province, as an autonomous body having its headquarters in Molde and being subject to the direction of the *Landhusholdingsselskap*.

This federation is organized rather differently from the others in that it is directly connected whith the *Landbruckslagene*. The distribution of goods to the district subsections, in accordance with the rules and prices fixed by the association's presidency, is provided for by the agencies known as the *Salsleg for Sondmoere* and the *Nordmoere Landbruksforrening* in Sondmoere and Nordmoere, respectively, and within the jurisdiction of Romsdal by the head-office in Molde directly.

Besides the goods which usually form the object of the trading activity of co-operative purchasing societies, this association supplies agricultural machinery and implements. Together with the *Landhusholdningsselskap* it publishes a monthly periodical for these associations of which 4,500 copies are printed. In 1916, its first year, its business amounted to 845,676 crowns, gross profits to 63,827 crowns, expenditure to 37,473 crowns and net profits to 26,354 crowns; the reserve fund was 54,440 crowns on 31 December 1916. The results obtained in 1917 were as follows: business 1,901,156 crowns; gross profits — 169,198 crowns; expenditure — 71,033 crowns; net profits - - 37,007 crowns; reserve fund (on 31 December) - 91,447 crowns.

§ 4. Agricultural selling societies.

These societies, whose beginnings go back to the last decades of last century, were largely developed in the first years of this century and subsequently until recent times. Their work has naturally been complicated by the war, especially the work of such of them as are exporting societies. There are four kinds of co-operative selling societies in Norway, namely:

(1) Co-operative societies exporting butter;
(2) » » selling eggs;
(3) » » » timber;
(4) » » » various agricultural produce collectively.

(a) *Co-operative Societies Exporting Butter.* — These societies succeeded in largely developing the export trade, especially on British markets where, thanks to the careful handling of the produce, the care given to packing and despatch and the right kind of collective contracts, the prices obtained approximated to and sometimes even surpassed those of Danish butter. Before the war one of these societies accomplished the annual sale of about 700,000 kilogrammes of butter worth about one and a half million crowns. The war seriously affected the activity of these societies. In 1915 there were 12 of them one in the provinces of Lister and Mandals and 11 in Stavanger province; the membership of [illegible] of them is known and aggregated 260; and 7 of them exported altogether [illegible],070 kilogrammes of butter worth about 21,000 crowns. In 1916 only 5 of them were active, in so far as is known. They sold 4[illegible],530 kilogrammes worth 16,795 crowns. In 1917 also most of these societies were inactive.

(b) *Co-operative Egg-Selling Societies.* - These societies numbered 40 at the end of 1916 as against 31 in 1912, but the activity of several of them had notably diminished or had been suspended outright in consequence of the war. For 1917 we have data referring to only 18 societies: their combined membership rose from 1630 in 1912 to 1773 in 1914 and 1784 in 1915, and then fell to 1355 in 1916 and 1493 in 1917; the quantity of eggs sold, which was 252,824 kilogrammes in 1912 and 332,069 kilogrammes in 1914 also fell, successively, to 296,487 kilogrammes in 1915, [illegible] kilogrammes in 1916 and 207,201 kilogrammes in 1917. In compensation, the increase in price was such that while the quantity sold decreased, the sums obtained by sales increased successively from 298,017 crowns in 1912 to 391,801 crowns in 1914, 434,696 crowns in 1915, 466,667 crowns in 1916 and 570,345 crowns in 1917. The average price obtained for a kilogramme of eggs had increased by 1.18 crowns in 1914, 1.45 crowns in 1915, 2.14 crowns in 1916 and 2.75 crowns in 1917.

(c) *Co-operative Timber Selling Societies.* — The war at first somewhat disturbed the working of these associations, many of which still suffer from a regrettable weakness of organization. But it was afterwards favourable to their activity, as can be seen from the figures showing the quantity and value of the timber sold, figures which do not however allow of a complete comparison since there is not for every year an equal number of societies (of which there were altogether about 80 at the end of 1916) as to which data are known; there are 29 such for 1915, 33 for 1916 and 40 for 1914. The quantity of timber sold was 87,979 dozen in 1915, 221,445 dozen in 1916 and 376,922 dozen in 1917; and the sums obtained for these respective sales were 2,019,072 crowns, 5,520,979 crowns and 16,945,432 crowns. It should be noted that the very great rise in prices largely contributed to the alteration in the total sum obtained by sales: the price per dozen rose from 22.90 crowns in 1915 to 25 crowns in 1916 and 45 crowns in 1917, thus doubling in two years.

(d) *Co-operative Societies Selling Various Agricultural Products.* — There are four societies in this group, namely:

(1) The *Boendernes Faelleslag* (Peasants' Society for Sales in Common).

(2) The *Summoere Salsslag* (Summoere Selling Society).

(3) The *Nordmoere Landbruksforretning* (Nordmoere Agricultural Society).

(4) The *Stavanger amts. Faelleslag* (Selling Society of Stavanger Province).

On 31 December 1917 the total number of their members was about 10,400. Their business in 1917 amounted to a total of 5,000,865 crowns, having considerably increased since previous years. It was 1,112,000 crowns in 1913, 2,040,017 crowns in 1914, 2,001,613 crowns in 1915, 3 420,538 crowns in 1916.

The *Boendernes Faelleslag* is the most important society of this kind. Its sales from 1915 to 1917 were as follows:

	1917	1916	1915
	crowns	crowns	crowns
Meat	1,400,000	1,000,000	765,000
Dairy produce	500,000	440,000	478,000
Grain, straw, potatoes . . .	750,000	550,000	250,000
Game	—	29,000	26,000
Total . . .	2,650,000	2,019,000	1,519,000

Net profits in 1917 amounted to 28,484 crowns as against 19,305 crowns in 1915.

The *Summoere Samslag* brought its business from 269,650 crowns, its amount in 1915, to 623,473 crowns in 1916 and 1,534,514 crowns in 1917. The principal kinds of goods sold in 1917 were grain, flour and fodder for 833,233 crowns, manures and seeds for 185,282 crowns, bacon for 175,805 crowns, butter for 91,879 crowns, meat for 67,941 crowns, skins for 41,712 crowns and eggs for 34,313 crowns. Net profits were 122,568 crowns as against 6,931 crowns in 1915. The reserve fund rose from 9,893 crowns in 1915 to 148,744 crowns in 1907.

The *Nordmoere Landbrukforretninger* had business amounting to 320,000 crowns in 1915, 493,590 crowns in 1916 and 816,351 crowns in 1917. The principal articles sold in 1917 were manures, fodder and seed for 405,745 crowns; meat and bacon for 126,760 crowns; butter for 121,490 crowns; machines, implements, etc. for 48,648 crowns; flour for 47,293 crowns. The net profit in 1917 was 20,928 crowns; the reserve fund was 45,825 crowns on 31 December 1917.

Data as to the *Stavanger amts Faelleslag* are lacking for 1917. In 1916 it sold only meat and game worth 300,475 crowns, as against 99,645 crowns in the previous year.

§ 5. Co-operative consumers' societies.

Co-operative societies of this kind, which originated as early as 1866, began to become established in Norway, after initial failures due to their founders' lack of skill which at one time seemed likely to compromise their future, towards the beginning of this century, and of late years they have developed very rapidly. It is enough to say that they numbered 370 in 1910, 601 in 1916 and 639 in 1917 ; the 252 co-operative societies which supplied information in 1910 had 40,376 members and business amounting to 18,544,565 crowns ; the 281 who did so in 1916 had 54,466 members and business amounting to 36,479,669 crowns ; the 293 doing so in 1917 had 71,692 members and business amounting to 58,665,850 crowns. It is calculated that in this last year 574 co-operative societies had altogether 122,007 members and business amounting to 105,637,150 crowns, gross profits of 12,410,930 crowns and net profits of 6,655,050 crowns.

We reproduce the most important data referring to the co-operative societies of rural communes in 1916 and 1917.

	1916	1917
Total number of co-operative societies in rural communes	557	586
Number supplying information	251	256
Of those supplying information:		
Membership	33,112	31,997
Business (in crowns)	26,852,269	42,212,030
Gross profits »	2,681,618	4,646,240
Net profits »	1,256,265	2,406,510

	1916 crowns	1917 crowns
Assets :		
In hand and in bank	542,980	839,450
Buildings, fixtures and land	1,553,224	2,221,320
Furniture	250,037	297,140
Stock in trade	5,169,133	7,581,240
Credit for goods	2,585,039	3,051,350
Depreciation fund and other assets	8,620	131,500
Total	10,119,033	14,122,000
Liabilities :		
Shares	1,457,321	2,124,430
Reserve fund	1,903,825	2,591,780
Mortgage debts	936,202	1,207,680
On pledged goods and other debts	4,230,961	6,207,180
Carried over to next year	408,243	512,370
Total	8,936,552	12,643,440

The co-operative consumers' unions have in their Union of Agricultural Co-operative Societies of Norway (*Norges Kooperative landsforening*) a central organization which includes an ever-increasing number of them. It arose in 1906 with the aim of promoting the economic development of the federated societies by collective purchasing and production in common, and in ten years it saw the number of its adherent co-operative societies increase in a regularly growing measure from 22 to 37, its total membership from 7,000 to 60,000 and the amount of its business from 182,641 crowns to 8,332,311 crowns.

Thus the societies federated in the Union constituted, 34.1 per cent. in 1916 and 37.1 per cent. in 1917 of all the consumers' co-operative societies existing in Norway.

Side by side with its trading activity the Union carries out a work of production in its margarine, tobacco and coffee-roasting factories, and it has a banking enterprise which includes a special savings section.

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This rapid examination of the development of the various branches of agricultural production in Norway in recent years is the best confirmation of the fact of the vitality of this movement, which arose at the end of last century and has succeeded in finding a way through initial uncertainties and mistakes, so that now it is steadily gaining strength. If the difficulties consequent on the war have, as was natural, made themselves felt in societies of certain categories, and rendered the task of others more arduous (we are thinking especially of the supplying of artificial manures and fodder from abroad by the societies for purchasing in common), these difficulties have not, taken all together, arrested the regular progressive movement which characterizes the most recent phase of Norwegian co-operative activity. Henceforward it can be certainly affirmed that the idea of co-operation has thoroughly penetrated the consciousness of the rural population, and that the advantages which farmers have obtained as this idea has gradually been realized constitute the best propaganda for its further development.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES

CANADA.

1. CREDIT ASSOCIATIONS IN MANITOBA AND SASKATCHEWAN. — *The Grain Growers' Guide*, Winnipeg, 26 March 1919.

Short-term Credit in Manitoba. — In previous issues we have explained the organization of rural credit societies in Manitoba under the Short

Rural Credits Act of 1917, and have given details as to the working of these societies in 1917 (1).

Figures regarding their business in 1918 have now appeared. Loans amounting to $215,581 were granted in that year, as follows:

Purpose of loans	Amount
Putting in and taking off crop	$ 50,981
Breaking up land	53,165
Purchase of live stock	30,126
Purchase of seed grain	18,165
Purchase of machinery	17,849
Liabilities and centralization of credit	21,069
Improvements	5,035
	$ 215,581

The loans were distributed as follows among the lending societies:

Society	Amount of loans
Roblin	$ 47,506
Minitonas	31,775
Landsdowne (Oak Lake)	29,895
Swan River	25,235
St. Andrews	22,045
Arden	17,700
Laurence	12,570
Westbourne (Langruth)	10,785
Glenella	9,250
Teulon	8,220
	$ 215,581

On 17 March 1919 forty-four rural credit societies in Manitoba had received charters, and the organization of thirty-seven of them was completed so that it was expected that that number would be doing business on 1 May.

An amendment to the Act, passed at the last session of the legislature, allows the board of directors to take for loans security additional to that already taken, to include mortgages on real estate or personal property and assignments of agreements of sale. Another amendment gives a rural credit society power to act as agent for its members in placing life insurance and insurance against hail and fire.

(1) See our issues for December 1917, pp. 41-46, September 1918, pp. 720-722, and November-December 1918, pp. 905-909.

Rural Credit in Manitoba and Saskatchewan.—In the
session of 1917 was planned a scheme for establishment in Manitoba
of a Rural Credits Association which would
borrow from the Farm Loans Board and make loans secured by mortgage
on farms for thirty and forty years (2).

In 1918 this scheme became law in the spring of the
month for which the association was active up to March 31 1919
from whom $2,000 was due to 700 farmers who thus saved in
interest more than $50 apiece in interest only. Practically every loan
has paid its due instalment. The association has sold bonds and
deposits totalling $1,800,000 both bonds and deposits being free from
provincial taxes. The government who may subscribe for and pay in
not more than 50 per cent of the capital stock up to March 31 1919
subscribed only $100,000 up to last March so that the association in
the beginning, is almost self supporting. It has invested its Victory Bonds as a sinking-fund reserve.

Some doubt was at first expressed as to whether a lending business could be carried on on a margin of 1 per cent which is the difference between 5 per cent interest paid on bonds and the 6 per cent interest charged for the loans. But this margin has been sufficient for all purposes and there is now a prospect of paying dividends to shareholders.

It is part of the method of the Farm Loans Board to supervise the use to which the money lent is put. Thus if $1,000 loan for
good and sufficient section (2) of land $1,000 may be withheld until 40 additional acres are cultivated and a barn is built and insured.

The Saskatchewan Rural Credits Association was established shortly after that of Manitoba. In the first year and a half of its existence the Saskatchewan Farm Loans Board lent $1,758,258.37 in 1,015 loans on 1,015 quarter sections. The total number of approved applications for loans were for about $2,000,000. The average loan in Saskatchewan was therefore $1,700 a quarter section, which is reasonable as compared with the average of $1,300 a quarter section in Manitoba where land is valued at $31 an acre as in Saskatchewan. On the amount of $1,000,000 the farmers saved in interest at least 1 per cent and generally 2 per cent.

At the end of the first six months of the operation of the association in Saskatchewan payments were due by the borrowers on only a small number of loans. They were all fully made. On 31 December 1919 four fifths of the amount due on the previous 1 November had been paid in spite of the very bad farming year in some parts of the province. The amount of the overdue principal was only $8,593.

In the future funds will be obtained by the sale of 5 per cent farm loan debentures the interest charged to the borrowing farmers being 6½ per cent. On this margin of 1½ per cent the provincial treasurer does not expect the Farm Loans Board to become self supporting until it has

$5,000,000 have been lent. The sale of the debentures was impeded by the campaign in 1917 for the Victory Loan, but the association nevertheless had in March 1919 obtained by its issues $1,559,480, of which only about one fourth was subscribed by the government. It is expected that when normal conditions return the bonds will sell readily, so that the Saskatchewan Association will be supported by Saskatchewan, and that it will be possible to repay the loan of $1,000,000 obtained from the Dominion government.

A clause in the Act governing the Saskatchewan association, which allows the holder of debentures to secure full repayment of his money by giving three months' notice, was much criticized but is stated to have stood the test of a difficult year. Up to March 1919 the total amount thus redeemed was $160,000 out of the total issue of $1,559,480, or only about 10 per cent.

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2. DEMAND FOR A FEDERAL CO-OPERATIVE ACT. — *The Canadian Co-operator*, March 1919.

The Co-operative Union of Canada has forwarded to the Premier and the Ministers of Agriculture and Labour a resolution that a Co-operative Act for the Dominion of Canada is urgently needed for the purpose of affording simple, cheap and effective facilities for the legal incorporation, regulation and control of co-operative societies, strongly urging the Government to introduce legislation for these objects.

The resolution points out, amongst other reasons for the proposed legislation, that societies are most successful where they act together and have co-operative opportunities as between the respective societies as well as between the members of each society, a result impossible of achievement if each society is dependent upon provincial statutes inconsistent with each other.

In forwarding copies of the resolution to the Ministers, the General Secretary of the Co-operative Union wrote: "The development of the co-operative movement in Canada must depend, to a great extent, upon the enactment of suitable legislation to regulate it. The machinery for organisation, incorporation and regulation should be national in scope. Our affiliated societies have, at present, to do the best they can under provincial statutes. In some provinces special co-operative legislation, varying in nature and suitability, has been enacted. In others societies have to depend upon the ordinary joint-stock companies acts, which are framed with the object of providing machinery for making profit on capital investment out of the public, a principle alien to those of the co-operative movement, which is designed, in its economic features, to induce the people to associate together to provide a more economical service for their own advantage in industry, commerce and finance".

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3. CO-OPERATIVE HORSE SALES IN SASKATCHEWAN. — *The Public Service Monthly*, Vol. VII, No. 8., Regina (Saskatchewan), March 1915.

With a view to finding a profitable home market for the surplus of farm horses which existed in certain sections of the province, the Saskatchewan Department of Agriculture arranged to hold in the latter part of March a series of co-operative horse sales under the auspices of the agricultural societies throughout the older settled parts of the province. These sales were arranged in circuits so that buyers might attend several sales in turn. Arrangements for each sale were in charge of the local agricultural society at the point where it was held. Sales were of two kinds. There were sales by auction, all animals for sale being listed with the secretary of the society and all settlements being made through him. In other cases farmers brought their animals into town on the date selected and dealt privately with the buyers in attendance.

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4. CO-OPERATIVE POTATO GROWING. — *The Public Service Monthly*, Vol. VII, No. 8, Regina (Saskatchewan), March 1919.

An interesting example of informal co-operation comes from Saskatchewan. The Earl Grey district is, it appears, specially suited for potato growing. The soil is a sandy loam which retains moisture well and thus insures a good crop of dry, mealy potatoes. The district has direct and convenient railway connection with Regina, Saskatoon and Moose Jaw, which are the principal potato markets of the province, and shipments can also be conveniently forwarded to Brandon and Winnipeg. Notwithstanding this favourable position, there was no market at Earl Grey for potatoes, owing to the fact that such a number of varieties was produced that it was impossible to secure a car-load of any one type and consequently dealers were not interested.

At a meeting of the local grain growers' association, it was agreed that the farmers of the district should grow, as far as possible, the same variety of potatoes. The "Irish Cobbler" variety was selected, and it was arranged to purchase a car-load of seed potatoes of this variety through the Co-operative Organisation Branch of the provincial Department of Agriculture. The Department has undertaken to inspect the crop, and the potatoes will be marketed by the Earl Grey Co-operative Association.

EGYPT.

THE WORKING OF THE AGRICULTURAL CO-OPERATIVE SOCIETIES. — Sadik Bey Hercin : *Quelques remarques sur le fonctionnement des sociétés coopératives agricoles en Égypte*, in *L'Égypte contemporaine*. Cairo, issue of April 1919.

In 1914 we noticed the beginnings of agricultural co-operation in Egypt (1). Sadik Bey Henein, director of the administrative and statistical

(1) See our issue (*Monthly Bulletin of Economic and Social Intelligence*) for March 1914.

department of the Ministry of Agriculture, has recently examined on the spot the working of some of the principal co-operative societies. Of 147 societies he has been unable to obtain information as to the 14 have a purely nominal existence; 15 have been dissolved or have practically ceased to exist after a more or less agitated period of life, 15 are at present working with a varying degree of success. The oldest, that of Choubra el-Nanla in the province of Gharbieh, was formed on 25 April 1909. We will describe it in some detail.

Co-operative Society of Choubra el-Nanla. — Choubra el Nanla, a well cultivated village having a rich soil, is situated both on the railway and on the main road from Cairo to Alexandria. The population is within reach of all the facilities for doing business usually offered by large commercial centres, but the town usurer has also, unfortunately, an easy access to his victims in the village.

The society's work is not confined to this village. The inhabitants of six neighbouring villages, of which the most distant is 5 kilometres away, enjoy the privilege of being admissible to it. The society's initial capital, which was subscribed by 67 members and entirely paid up, was 309.60 Egyptian pounds, divided into 1548 shares. On 31 December 1917 there were 206 members and a capital of 677 pounds represented by 3174 shares.

Thirty per cent of net profits having been assigned to the constitution of a reserve fund, this latter reached the sum of 241 pounds or about 36 per cent. of the society's capital. Ten per cent. is divided between two funds, one for the assistance of needy members and one for the encouragement of works interesting to agriculture or co-operation. The remaining profits are distributed among the co-operators in the form of a dividend (about 30 per cent.) and bonuses on purchases (30 per cent.).

Since its formation this society has always received all credit facilities from the National Bank. The last loan was contracted for in 1917, was of 800 pounds and bore interest at the rate of 6 per cent. per annum. The president's signature binds the society which is on an unlimited liability basis. The president submits to the bank, at one and the same time, the decision of the general meeting which authorizes him to contract a loan and a legalization of signatures. All the society's available funds are kept on current account in this bank and bear interest at the rate of 3 per cent. per annum.

From the beginning the society dealt chiefly in articles of consumption — supplying members with manures, cottonseed, broad beans, coal and oil for machinery. All sales are made on credit. Payment is generally fixed for November and December, but the debtor is entirely free to wait until he has sold his cotton, which he sometimes does not do until January or February, before he pays. In 1917 the total amount of the society's purchases was 1,616 pounds; cottonseed was sold to members at a profit of 6.7 per cent, and broad beans at a profit of 10.5 per cent., both for a period of about eleven months. It is evident that in fixing the selling price the society has sought merely to obtain a reasonable margin to dis-

tributes among the reserve fund, the bonuses and the dividends, after [illegible] costs have been covered and interest on borrowed capital has been paid. We should add that members have not always been very punctual in making their payments, and that in spite of the present agricultural prosperity about 70 pounds due from 1917 have still to be received.

No transaction was undertaken in 1918. The president supplied on this point the following explanation. In spite of its eight years of life and the practical proofs of its usefulness which the society has given in this period, the villagers still think of it only as an easy resource when they are short of money and feel the need of buying on credit. When purchasing on credit they are entirely undiscerning as to the quality of the merchandise they buy, and practically accept all that is offered them, so long as their payment of the price can be delayed. Not only is an inclination for doing business on credit to be noticed in them, but this method of doing business seems to be that they adopt as a general rule unless they find themselves, as at this moment they do, in a period of exceptional prosperity. After eight years of purchasing in common this disappointing state of affairs shows that the peasants have had no faith in the advantages of co-operative purchasing, as regards either quality or price; that they are impelled merely by lack of means to satisfy their needs by making use of a co-operative institution. Now that they are going through a period of opulence, they seem to look upon co-operative purchasing as placing them in a kind of tutelage from which they are only too happy to escape. There is no indication that the idea of co-operation has taken root among them or that they have understood the importance of action in common. So much is this true that the president of the society states that in a moment of pessimism he entertained the idea that to keep the society going any longer was useless. However he strongly resisted this idea, and resolved to undertake, with the help of one or two zealous workers of the village, the co-operative education of the villagers who are of a type slightly superior to that of the average Egyptian fellah.

Co-operative Society of Koin el Nour (province of Dakahlieh) — We will now turn our attention to the society which has at present the largest membership, that of Kom el-Nour.

This society was formed on 12 February 1911. It had at first 225 members and a capital of 1,[illegible]90 pounds divided into shares of one pound each.

On 31 December 1918 it had 472 members, and its capital was 2,727 pounds, and had therefore increased by 150 per cent. while the members had increased by only 110 per cent.

The society did not at first impose collective liability on its members, and its loans were therefore obtained by means of bills of some of the chief members, acting in their own name and quite independently of the society. After five years' experience of this method it was recognized to be inconvenient, and in 1915 the rules were amended to allow the introduction of the principle of collective unlimited liability. Since then the president,

on production of the authority to contract a loan, signs the society's bills in virtue of his office.

Borrowed funds are, when needed, obtained from the National Bank of Egypt at 7 per cent. The last loan of 1,500 pounds was contracted in July and repaid in December 1918.

Until the beginning of this year available funds were not deposited in any bank but were kept by the treasurer. But business reached the sum of several thousands of pounds; and the society lost the interest on these funds which sometimes amounted to important sums. Thus the balance in hand which the treasurer held on 31 December 1918 was 1,484 pounds. Since that date the society has opened a current account at the bank.

Before we examine the chief work of this society, it is interesting to notice its municipal and other kindred activities whence the village has derived a large profit and the society a great reputation. These activities comprise the upkeep of roads, lighting, the watering and sweeping of the village streets, the upkeep of a fire pump, the institution of small local agricultural competitions and the offering of prizes to exhibitors, the purchase of a bull for purposes of breeding, and the encouragement of elementary education by making grants to the two boys' and girls' schools of the village and awarding prizes to the pupils. During the last three years the efforts made in these directions have been less intensive than previously, but a village council is in course of establishment, in virtue of a decree of the Ministry of the Interior of 9 February 1918, and it will relieve the society of this whole task.

As regards the society's main work, it is concerned with consumption and co-operative credit. Every year large quantities of cottonseed, chemical manures, beans for fodder, barley and maize seed, coal, lubricating oil, etc., are bought for distribution among members. In the annual reports there are repeated allusions to the circumstance that, thanks to the good offices of the society, members have been able to satisfy their needs for these products at reasonable prices and with every assurance as to excellence of quality.

We now come to a striking feature of the society's work, namely the spirit of capitalism which characterizes its business. The following facts are cited by Sadik Bey Henein. While the society pays interest at the rate of 7 per cent. to the National Bank on the sums it borrows, loans to members bear interest at the rate of 9 per cent., plus 2 per cent. commission. Moreover the margin between the purchase and sale price of the various articles in which the society deals is often too wide to be in agreement with a true conception of co-operation. The following are some examples:

In 1914 on a sum of 2,337 pounds spent on the purchase of beans a profit of 304 pounds or 13 per cent. was realized; on coal purchased for 200 pounds the profit was 23 pounds or 12 per cent.; a sum of 3,249 pounds devoted to the purchase of chemical manures brought in a profit of 481 pounds or 15 per cent. In 1915, 823 pounds spent on the purchase of

beans brought in a profit of 90 pounds or 11 per cent.; chemical manures, worth 1,717 pounds, yielded a profit of 199 pounds or 12 per cent; 353 pounds worth of cottonseed gave a profit of 67 pounds or 19 per cent. In 1918 cottonseed was sold at a profit of 12 per cent. We should note that these percentages were sometimes realized in periods far less than a year.

This system of lending at high interest and selling at a large profit is easily understood if we glance at the dividends distributed by the society. In 1914 such dividend was 10 per cent.; in 1915 it was 8.5 per cent.; in 1916 it was 9.5 per cent.; and in 1917 and 1918 it was 10 per cent. The society thus attracts capital by offering high dividends, which it provides by raising the price of the goods it sells and the rate of interest on its loans to members. The rules stipulate that 50 per cent. of net profits be distributed. Of this 50 per cent., half should be paid in the form of a dividend and the other half in the form of bonuses on the transactions of members with the society. This rule has remained a dead letter, having apparently never been applied, and the whole 50 per cent. has been distributed in the form of a dividend. This is the more regrettable because the profits are very largely the result of the sale at high prices of supplies and of the high rate of the interest received on loans. In other words, the society derives a profit from the members with whom it does business, in order to pay large dividends to members with whom it has no business relations and who use it as a means of making a profitable investment. This system of high dividends is one which risks making the capitalistic spirit predominant in all the business of a co-operative society and provoking within the society a conflict between the interests of capital and those of borrowers and purchasers. It also encourages the tendency to usury, to eliminate which is one of the aims of co-operation.

In 1918 the society made ten loans amounting altogether to 725 pounds. The largest of them was of 200 pounds and was made to enable the expenses of a marriage to be met.

The sums owed by the members of the society, in virtue of the loans they had received and their purchases on credit, were as follows on the 31st of December of each of the five following years:

1914	4,209	pounds
1915	4,073	»
1916	3,683	»
1917	4,306	»
1918	3,349	»

Repayment is generally fixed for November or December, that is for the time of harvest. The fact that large debit balances are carried over from one year to another does not seem to show that members settle for their debts with much punctuality.

We should add that the society has attempted with some success to

sell its members' cotton harvest, and, in certain cases, their wheat, maize and barley harvests. It confines itself however to placing buyers in touch with conscientious sellers, to ensuring that the price of [illegible] equitable, and, finally, to supervising the weighing and delivery of the product. The buying dealer examines the harvests of members in their own granaries. The society's attempts to arrange the co-operative sale of the aggregate harvests of its members have been without result.

The other co-operative societies examined by [illegible] give rise to analogous remarks.

GREECE

THE PROGRESS OF AGRICULTURAL CO-OPERATION. — [illegible] *Le mouvement coopératif en Grèce* [illegible], Paris, March-April 1919.

The origins of the co-operative movement in Greece are very recent. From 1912 onwards the Ministry of National Economy undertook by means of a specially formed department methodical propaganda work in favour of co-operation. In 1914 an organic law was passed, and it has allowed the legal bases of the co-operative societies to be established, whether they are agricultural, urban or labour societies, credit, savings, purchase, sale, consumption, production, mutual insurance or other societies.

At the end of 1918, 820 agricultural co-operative societies were registered at the Ministry of Agriculture. They had 32,648 members and a share capital of 2,515,540 francs. Only some hundred of them have unlimited liability, and most of this number have been formed in one department, that of Messenia. The limited liability of other societies usually varies from twice to five times the amount of shares, but in some cases is as much as ten or fifty times this amount. The total sum represented by this limited liability is 15,972,845 francs. The sphere of a society does not usually go beyond the territory of the commune in which it is situated. About three fourths of the agricultural co-operative societies are mixed credit, savings, purchase and sale societies. To some extent they even act as consumers' co-operative societies, for they procure for farmers not only machines, implements, manures and other articles necessary to agricultural work, but also articles necessary to domestic labour and consumption. These mixed societies render great services to agriculturists in small places. The need of founding distinct societies is felt only in the largest villages, where business is more complicated and there is possibility of finding a larger number of competent administrators. In the case of these villages the rules provide that the association in question shall contribute to the formation of specialized societies as circumstances permit.

Among other co-operative societies we should notice the special societies for purchase, sale and production (wine making, dairy and oil producing socities). The societies for the sale of currants, which are tending to form a union, are worthy of note.

A certain number of co-operative societies have grouped themselves and

formed four district unions. The formation of other unions and of a National Federation, which will strengthen the general movement, is in course. A paper advocating co-operation is published in Athens.

The National Bank now procures credit for co-operative societies. The loans it has granted them are regularly repaid. They amounted to nearly two million francs in 1916 and 1917, were made to 135 societies, and bore interest at the rate of 5 per cent. In Macedonia, Epirus, Crete and the islands of the Archipelago there are three State agricultural banks which also contribute to co-operative credit.

The measure of providing on credit, for co-operative viticulturists' societies, sulphate of copper and of sulphur, imported wholesale at reduced prices and under a State guarantee, has also been very successful. For 1917 the Ministry of Agriculture guaranteed credits amounting to 600,000 francs of which 95,268 francs were for co-operative societies. The special foundation of a central institution of credit is also contemplated.

JAPAN.

STATE TENANTS' ASSOCIATIONS IN KOREA. — *Annual Report on Reforms and Progress in Chosen (Korea) (1916-1917).* Keijō (Seoul), July, 1918.

There are about 250,000 tenants holding leases of State lands in Korea. For the protection and betterment of these tenants, the Government advised them in 1911 to organize State Tenants' Associations at Keigan and seven other places, giving a subsidy of 500 *yen* to each. The work of the associations having proved of value, the organization of more associations was encouraged, the same subsidy as before being given to each, and by the end of the fiscal year 1916 the total number of associations reached 174. They are scattered over all the provinces and have from 100 to 500 members each. Since 1913, an additional subsidy of 500 *yen* has been granted to 89 of them because of their large membership and for having proved themselves especially efficient.

A State tenants' association has a president and seven councillors elected by vote from among the members and a director and supervisor appointed by the Government. The work of the association consists in improving agriculture, in furnishing working funds, in the consignment sale of the produce of members, in the joint purchase of tools, seeds and manures, in the promotion of industries auxilary to agriculture, and in the encouragement of thrift and saving. The associations not only directly induce the betterment of the State tenants, but indirectly exert a good influence towards the improvement of the local people at large.

RUSSIA.

THE WORK OF THE CENTRAL ASSOCIATION OF FLAX-GROWERS IN 1917-18. — *The Russian Co-operator*, Vol. 3, No. 3, London, March, 1919

The third year of the existence of the Central Association of Flax-Growers (1) has been marked by a broad development of its operations in

(1) With reference to the formation and objects of this association see issue of July 1917.

the co-operative marketing of flax by the producers. The idea of the sale of flax through co-operative channels has gained considerable ground amongst the small flax-growers, not only in those localities where such a sale was the usual practice before, but also in new localities and districts, where the existing co-operative societies did not engage in such operations, such as the Viatka district, or the Pskov district in so far as the latter was not occupied by the Germans.

The Association was frequently approached by peasant flax-growers with requests to establish in their localities co-operative societies, and to start the co-operative gathering and marketing of flax. Responding to the demands of the local population, the work of the association in the district of its former activities was extended so as to include a possibly larger number of growers and enable them to deliver their flax to the Association.

At the beginning of the flax season of 1917 the Association made arrangements for the collection of two million poods (about 33,000 tons) of flax. The scheme was worked out in August 1917, and went on notwithstanding the Bolshevik Revolution in November of that year. The collection of the flax was carried out in the single localities by the co-operative societies and their unions, their work having started in November 1917.

The financial difficulties resulting from the political situation delayed the progress of the work, but at the same time the small flax-grower had so much confidence in his co-operative society that very frequently he delivered to it his flax without receiving or asking for any payment whatsoever; in the majority of cases such payments when made did not exceed from 25 to 50 per cent. of the value of the product at the local market prices.

The success of the operations of the year 1917-18 surpassed all expectations, and the total of the flax collected by the Association exceeded the two million poods previously estimated.

The British market having always been the chief consumer of Russian flax, the Association entered into negotiations with the official of the British Government in Moscow entrusted with the purchase of flax. Already in November, 1917, this official offered to the Association to undertake the delivery of their flax to the British Government up to 25,000 tons. The basis of the agreement which the Association suggested to the British Government consisted in that the flax was to be delivered at some Russian port, but on the condition that (1) the flax so delivered must in no case and under no circumstances be requisitioned; and (2) the British Government undertook full responsibility for any injury or accident to the consignments of flax lying in the ports.

Although no objection was raised at that time to the above stipulation no agreement was actually concluded. Nothwithstanding this the Association began already in April 1918 to forward consignments of flax to Archangel, as far as the political conditions permitted of this being done. At last in July last a written communication was received from the official of the British Government fully accepting the above two stipulations. By that time over one million poods of flax had already been brought to Archangel.

In August, when Archangel was occupied by the Allied armies the town was cut off from Central Russia, and no further deliveries of flax became practicable, although the British Government was willing to purchase another million poods. The flax already collected at Archangel was, however, successfully shipped to England.

SOUTH AFRICA.

PROPOSED CENTRAL ORGANIZATION OF TOBACCO-GROWERS — *The South African Journal of Industries*, Vol I, No 6, Pretoria, February 1918.

At a conference of tobacco-growers held at Capetown, it was recommended that every tobacco growing district of the Union of South Africa and of Rhodesia should form a society; that manufacturers and buyers be asked to purchase leaf only through the medium of societies; that an interchange of statistics between societies as regards crops, prices, etc. should be arranged, and that a central organization should be formed, consisting of two members from each society, amongst whom an executive committee should be elected. While the object of the central organization would be, in general, to consolidate the interests of the tobacco industry in South Africa, it was specially recommended that the executive committee should make such arrangements as would enable the various affiliated societies to purchase collectively their stocks of the necessary requirements for the tobacco industry.

The tobacco-growers are already strongly organized in South Africa. The Rustenburg Tobacco Co-operative Society has over 2,500 members and owns property valued at over £10,000. The Western Province Tobacco Society comprises practically all the growers of Turkish tobacco in the district and controls over 90 per cent. of the local production. The Potchefstrom, and Vredefort Association consists of 150 members, representing 70 per cent. of the local production. In Rhodesia, the tobacco-growers' societies control 65 to 70 per cent. of the tobacco produced in the colony.

SWITZERLAND.

1. CANTONAL CO-OPERATIVE SOCIETIES FOR THE PRODUCTION OF SEED — *Bündner Bauernblatt*, 8th year, No 4, Coira, 1919.

The Swiss Department of Public Economy has lately addressed itself to the cantonal governments, urging them to promote the formation in the various cantons of co-operative societies for the cultivation of seed-plants and the production of seed. These societies should undertake the planting and distribution of those kinds of grain, and of the vegetable species in general, which lend themselves to being cultivated in Switzerland and are recognized as so doing by the Swiss Experimental Institute for the Examination of Seeds. The fundamental object of the societies is to place the seed thus

obtained on the market. They work under the supervision of the Experimental Institutes. Their members are also obliged to facilitate the work of the Experimental Institutes, and, in general, to promote agriculture by making trial of new forms and methods of cultivation.

The formation of co-operative societies of this kind is supported and encouraged by the Confederation and the cantons. They can dispose of money for the acquisition of the machinery necessary to carrying out their programme The co-operative societies for the production of seed hitherto founded take in, for the most part, vast territories. For example, there is one co-operative society for the territory of Soletta, another for that of St. Gall, etc. Only farmers who regularly produce a quantity of seed in excess of their needs are accepted as members.

At present other co-operative societies of this kind are in course of formation in the cantons in which they have hitherto been lacking, as in the Grisons, and it may therefore be anticipated that within a short time every Swiss canton will have a co-operative society for the production of seed.

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2. THE CENTRAL FEDERATION OF SWISS AGRICULTURAL CO-OPERATIVE SOCIETIES. — *Der Schweizer Bauer* Berne, 12 March 1919, No 30; *Die Familie*, Zurich, 14 March 1919, No 11.

Agricultural co-operation in Switzerland has hitherto been without a central organ maintaining unity among its several parts. It may be said that each canton had its own independent rural co-operative society. As early as 1898 some federations of German Switzerland had united in a weak association, which lasted several years without attaining to noteworthy results because the fererations in question continued to act independently of each other after the foundation of the common organization which was to have held them together. The situation was not improved in 1906 when the Swiss Section of the International Federation of Co-operative Societies was founded. This section came out in 1911 from the International Federation, and from this time attempts to reach a lasting and vital union of all the co-operative federations of Switzerland were resumed. The difficulties which appeared during the war made more pressing the need which had already show itself. In 1918 meetings were held of representatives of the cantonal federations, in the course of which it was agreed to found the Central Association of the Agricultural Co-operative Federations of Switzerland. It may be said today that the formation of this organ is definitely assured. A provisional presidency has drawn up rules; representatives of all the agricultural co-operative societies have studied plans and formed a sound organization.

The exact aims of the central association are the acquisition of merchandise for the associated federations by wholesale purchasing, the promotion of the utilization of products, and propaganda work in favour of the idea of co-operation.

Federations belonging to the central association must have at least 2000 individual members, and the co-operative societies they comprise must declare in their rules that members give a collective guarantee. The rules of the federations must moreover include a provision that the federated co-operative societies are bound by their federation's engagements at least to the extent of 20 francs per federated member.

These provisions procure importance and credit abroad for the central association. The capital necessary to the undertaking is being collected by admission fees of 5 francs from every individual federated member.

The central association will be directed by a presidency, the members of which will be taken from the various associated federations. Its executive agent will be the manager, helped by two members of the presidency.

The necessity and usefulness of this central association were recognized by all agricultural circles in Switzerland.

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3 THE WORK OF THE BERNE FEDERATION OF DAIRY AND CHEESEMAKING SOCIETIES IN 1918 — Agricultural supplement to the *Neue Zuricher Zeitung*, 6 May 1919, No 665

The Berne Federation of Dairy and Chesemaking Societies, which was founded in 1911, is the most important of the federations grouped by the Swiss Central Union of Milk Producers. This federation comprised 726 societies in 1918 as against 701 in 1917, and had 136,789 cows producing 2,484,393 quintals of milk, as against 2,615,683 quintals in the previous year. Outside the societies the federation had 252 members who delivered 45,877 quintals of milk.

Owing to the fact that the whole quantity of milk was remitted to consumers many cheese factories closed. The daily delivery of 40,000 kilogrammes of milk which was anticipated for Basle had to be reduced to 25,000 kilogrammes, and in the Valais and Neuchâtel there was an analogous position. It is thought that these conditions will persist during the current year, so long as the area on which corn and potatoes are grown is not diminished and the price of milk, which the public authorities have kept low, is not raised.

The federation has drawn up a scheme for the construction of a new building to cost 1,254,000 francs. This will also accommodate the Swiss Peasants' Secretariat and the library of the Economic Society. The federation is moreover subscribing up to 100,000 francs to the foundation of a printing-press which will cost 500,000 francs.

UNITED STATES.

1 FRUIT PACKING ASSOCIATIONS IN NIAGARA COUNTY. — *Official U.S. Bulletin*, Vol. 3, No. 539. Washington, 15 February 1919.

The Niagara County Farm Bureau has, in co-operation with the New York State College of Agriculture and the United States Department of

Agriculture, brought about the formation and incorporation of seven central fruit packing houses which are now at work. Four of them are entirely new, while the other three have been continuously or intermittently active for the last four years.

These seven associations will this year pack approximately 120,000 barrels of apples, 50,000 bushels of peaches and 12,000 bushels of pears, and will sell co-operatively 135 tons of grapes. At present prices, the business would amount to about $800,000; but most of the apples are going to be stored until prices rise, and the amount involved may therefore be as much as a million dollars.

The sum initially invested in packing houses and such equipment as scales and graders was $25,700 and was contributed by 174 growers.

All apples and peaches are being packed in accordance with a common standard, of which the rules and regulations have been made by the county association, and all will be marketed under a common brand. This brand is owned by the county association, and therefore any local association which does not fulfil requirements can be prevented from using it.

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2 ORGANIZATION OF CREDIT UNIONS. — *California Cultivator*, Vol. I,II, No. 12, Los Angeles and San Francisco, 22 March, 1919; Assembly, No. 280. State of New Jersey. Bill introduced 4 March 1919.

Nine States of the United States — Massachusetts, New York, Rhode Island, Texas, South Carolina, North Carolina, Wisconsin, Utah and Oregon — have passed laws regulating credit. About 125 credit associations have been organized, the larger number of them by wage earners in towns. In many New England towns personal credit unions have been formed, and have fostered saving among the labouring classes and their children. In Massachusetts, where the first of these clubs — The Myrick Union — was founded in 1908, there are now 80 credit clubs. The attempt to bring into being strictly rural credit associations has been more successful in North Carolina, where the law on credit was passed in 1915, than elsewhere.

The capital stock company is the form of organization typical of the credit associations of the United States. The associations having share capital limit the liability of members, a fact which has served to attract members and capital. To communities in which share capital is not readily available the non-stock association affords a means of obtaining funds on the basis of an unlimited liability.

The credit union will accept deposits from anyone but will lend money, under restrictions, only to its members. It obtains funds through share capital, by accepting general deposits or by borrowing in the name of the association. A small membership fee is usually charged by a non-stock association, and a small working capital is thus secured. In the share-capi-

tal clubs a share sells for from $5 to $10. The purchase of shares is usually unlimited but is sometimes controlled by State law or by a by-law of the association concerned. No salaries are paid except a nominal one to the secretary-treasurer, who is usually a farmer or a business man having a connection with a local bank.

The credit union may be said to be a connecting link between the farmer and the banker which improves the farmer's chances of doing business with the bank. It allows farmers to get into intimate touch with their home bankers. The bankers usually realize that it is ultimately to their interest to help the credit unions.

Usually each credit union makes definite arrangements with a bank that the latter shall act as a depository and furnish loans on specified terms. Thus one of the unions in North Carolina receives from its bank interest at the rate of 3 per cent. on deposits on current account and 4 per cent. on deposits on savings account, that is on sums left on deposit for three months or longer. This union pays interest at the rate of 5 per cent. on its loans from the bank. It pays to its members 5 per cent. on their savings accounts, and lends to them at 6 per cent. Such a credit union not only accustoms its members to the use of current and savings accounts but also enables them to obtain loans for approved purposes of production on better terms than elsewhere. A loan of this latter kind is primarily guaranteed by the borrower's character, but to give additional security his note must have two endorsers.

The success of the agricultural credit unions in North Carolina has been largely due to the propaganda work in favour of credit organization which the State Agricultural Department has accomplished among farmers. The promotion and supervision of the organization is entrusted to an official of the Division of Markets and Rural Organization of the State College of Agriculture. He helps farmers who are interested in the subject, and advises them not only as to the formation of clubs but also as to the organization of these after they have been formed.

In December 1918 the 17 credit unions of North Carolina had a total membership of 783, and 299 depositors who had paid $ 7,977.27 on shares of stock. Deposits amounted to $14,175.25 and loans to borrowers to $17,178.76. Only $3,200 had been borrowed from local banks while the cash in banks amounted to $7,529,82. The total resources of these 17 co-operative clubs amounted to $27,465.01.

The Vadese Union, organized on 10 February 1917, has 80 members, and 87 depositors who have paid $1,746 on shares. In December 1918 its total deposits amounted to $6,655.08 and 31 members had borrowed $6,916.43. The club had $1,429.78 in the bank and its total resources amounted to $8,986.23. The Lowes Grove Union, the oldest in the State, which was organized on 20 January 1916, had 55 members and 79 depositors in December 1918. Its paid-up shares amounted to $687.50, its deposits to $1,159.78, its loans to 30 members to $2,326.45. It had borrowed $600 from the local bank, its cash in banks amounted to only $1.41, its total resources to $2,632.29.

In addition to handling deposits and floating loans, some of the North Carolina unions help their members to buy cottonseed, meal and corn or soy bean seed meal. A credit club, by buying these commodities by carloads, effects a saving for its members who would otherwise have to buy small quantities at retail prices.

On 4 March 1919 a General Co-operative Bank Bill was introduced in the legislative assembly of New Jersey. It provides that banking powers may be exercised by associations of any form managed on a co-operative plan, and authorizes combination among associations. No exemption from taxes or other special privileges are granted State intervention can occur only through the right of supervision which rests in the Department of Banking and Insurance. The authorized associations may receive deposits and discount negotiable paper but may not issue currency notes, this last function being reserved exclusively to the Federal Reserve Banks. The co-operative banks may also buy and sell commodities and real estate as agents of members, and may sell them insurance of any co-operative or mutual life or other company or associations. The use of funds and facilities is restricted to members except in the cases of the purchase of government stock and bonds and the reception of deposits, the former constituting the safest investment of funds which might otherwise lie idle and the latter representing the easiest method of using credit to obtain funds. The Bill provides for limited, unlimited and contributory liability, protected by an indivisible reserve gradually accumulated from earnings of the bank. The shares of associations having share-capital may have any face value from $5 upwards, and are always payable by instalments, fines being imposed for withdrawals and defaults.

Part II: Insurance and Thrift

ITALY.

THE NATIONAL INSTITUTE FOR INSURANCE AGAINST THE ACCIDENTS OF LABOUR.

SOURCES:

LAW OF 8 JULY 1883, No. 1473, FOUNDING A NATIONAL INSTITUTE FOR INSURANCE OF WORKMEN AGAINST THE ACCIDENTS OF THEIR WORK.

CONSOLIDATED TEXT OF THE LAWS OF 17 MARCH 1898, No. 80, AND 29 JUNE 1903, No. 243, AS TO THE ACCIDENTS OF WORKMEN DURING THEIR WORK, approved by a Royal Decree of 31 January 1904, No. 51.

LAW OF 28 MARCH 1912, No. 304, APPROVING THE AGREEMENT OF 16 JUNE 1911 made with the institutions which founded the National Institute for Insurance of Workmen against the Accidents of their Work.

ROYAL DECREE OF 5 JUNE 1913, No. 698, approving the annexed regulation for the aforesaid National Institute.

LIEUTENANCY DECREE-LAW OF 23 AUGUST 1917, No. 1450, AS TO PROVISIONS FOR COMPULSORY INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR.

A. L.: La Cassa Nazionale infortuni nel suo trentennio (*The National Institute for Insurance against Accidents in its Thirtieth Year*). In *Bollettino della Cassa nazionale d'assicurazione per gli infortuni degli operai sul lavoro*. Rome, No. 1, January 1914.

U. F.: Il nuovo ordinamento della Cassa Nazionale Infortuni (*The New Organization of the National Institute for Insurance against Accidents*). Ibid.

MAGALDI (Vincenzo): La Cassa Nazionale Infortuni (*The National Institute for Insurance against Accidents*). In *Rassegna di assicurazioni e previdenza sociale*, Rome, No. 3, March 1917.

In our issue for last March we saw, while examining the recent measures with regard to compulsory insurance against the accidents of agriculture contained in the decree-law of 23 August 1917, No. 1450, that the management of insurance of this type is principally entrusted (1) to the National

(1) In the bill which the Ministry presented to the Senate at the session of 26 March 1917 the idea of entrusting the management of the insurance only to the National Institute for Insurance against Accidents was preponderant, but during the discussion a tendency to preserve the action of pre-existing mutual societies became manifest. The result was a temporary system of mixed management, entrusted principally to the National Institute for Insurance against Accidents, which was to keep agricultural insurance distinct from insurance against the accidents of industry, but also to some mutual societies, insuring consortia and syndicates, and other authorized bodies which had practiced agricultural insurance exclusively or mainly since 26 March 1917. While the decree-law entrusts the management to the National Institute for Insurance against Accidents directly, recognition by royal decree is necessary in the case of mutual societies. See in this connection our article to which we have already referred (pages 121-135).

Institute for Insurance against Accidents, a public institution and the official organ of the insurance against the accidents of labour which was created by the law of 8 July 1883, No. 1473, and placed under the supervision of the Ministry of Industry, Commerce and Labour. We therefore think it opportune to explain the origin, organization and development of this movement at a time when the National Institute for Insurance against Accidents is about to assume the management of so important a branch of thrift.

§ 1. Origin and early phases of the working of the insurance.

The National Institute for Insurance of Workmen against the Accidents of their Work originated in a bill as to the reorganization of savings-banks, presented to the Chamber of Deputies at its session of 30 November 1881 by the Minister Berti. This bill obliged these banks to assign two tenths of their annual net profits to the National Fund for the Old Age Pensions of Workmen. This bill, which had so excellent an object, was not passed owing to grave doubts which arose as to the legitimacy of the compulsory contribution exacted from the savings-banks, but the discussions to which it gave rise were an occasion for the agreement made on 18 February 1883 between the Ministry of Agriculture, Industry and Trade, the savings-banks of Milan, Turin, Bologna, Genoa, Rome, Venice and Cagliari, the *Monte dei Paschi* of Siena, the *Banco di Napoli* and the *Banco di Sicilia* for the foundation of the National Institute for Insurance against Accidents, which agreement was approved by law on 8 July 1883 (No. 1473). The founder institutions undertook, without any idea of profit, all expenses of administration, and also constituted a guarantee fund of 1,500,000 liras to which they contributed in the following proportions: Savings-Bank of Milan 625,000 liras; Bank of Naples 200,000 liras; Savings-Banks of Rome, Bologna and Turin, Bank of Sicily and *Monte dei Paschi* of Siena 100,000 liras each; Savings-Bank of Genoa 75,000 liras; Savings Banks of Cagliari and Venice 50,000 liras each.

On the basis of the agreement aforesaid the National Institute was administered by the executive committee of the Savings-Bank of Milan and managed by a Higher Board composed of representative of the founder institutions charged with making rules and with the general direction of the administration.

In order to compensate for losses due to accidents the insurance, which then was voluntary, could take two forms, the individual or the collective form, and could be subdivided according to whether the insurance was procured by the employer only, by him together with his workmen, or by the associated workmen.

The National Institute was granted exemption from the stamp and registration duty for policies, registers, certificates, notaries' deeds and other documents.

The constituent agreement was amended by royal decrees of 24 July 1887 (No. 4808) and 22 November 1888 (No. 5827) which established rules for the payment of the quotas which the founder institutions had engaged to contribute to the guarantee fund, freeing them from the burden of expenses of administration.

The National Institute became active on 8 July 1884, but its first experiments met with modest results, either because the organization of free insurance was not sufficiently efficient or because the management and the technical agencies of the institution were not suited to their ends. The results are shown by the following figures:

TABLE I. — *Results of Insurance from* 1884 *to* 1898.

Year of business	Year	Number of insured workmen	Premiums — Liras	Benefits — Liras
1st	1884	67	130.80	—
2nd	1885	9,556	17,240.37	8,192.86
3rd	1886	24,440	92,353 01	119,737.82
4th	1887	36,992	145,714.54	130,933.85
5th	1888	58,023	232,542.30	192,716 68
6th	1889	77,876	301,657.26	234,976.05
7th	1890	94,507	390,084.33	331,814.87
8th	1891	103,238	451,837.39	378,941.68
9th	1892	109,253	456,314.42	371,598.42
10 h	1893	118,133	495,446.66	413,855.47
11th	1894	125,119	519,397.56	459,840.05
12th	1895	138,192	600,965.79	521,363.85
13th	1896	146,696	664,076.56	529,358 38
14th	1897	158,214	747,035.87	694,556,01
15th	1898	160,772	767,789.37	665,911,78

Meanwhile the development of industry, the serious inconveniences of the lack of a system of insurance against the accidents of labour, the rise of new theories as to the risks of trades, led, after long and fruitless attempts at legislation, to the law of 17 March 1898, No. 80, which imposes an obligation to insure against accidents, leaving the choice of the insuring institution free. But the National Institute did not reap notable benefit from the new law, for although it was provided that workmen employed on works, enterprises or establisments, directly managed by the State, the provinces or the communes or forming the object of concessions or contracts given by them, must be insured with the National Institute, this institution was, on the other hand, compelled to accept any applica-

tion for insurance while private companies might practise selection of risks to their own advantage. The exclusive grant of the insurance of workmen working for the State or the local authorities was afterwards practically annulled by the exemption from the obligation of employers who should set up private funds or unite in mutual unions. On the other hand, the free choice of the insuring institution, although seemingly a sound principle and one inspired by liberal principles, was proved to be " one of the most noteworthy of the causes which give and gave rise to the law on the accidents of labour ". Side by side with the National Insurance there arose private insurance companies which entered into a competitive struggle with the National Institute, granted in their insurance contracts notable reductions on the regular tariffs approved by the government, and then denounced these contracts so soon as it was seen that they were not profitable (1).

Such being the state of affairs, it can be understood that although more than a million workmen were protected by the law of 1898 the number of those insured with the National Institute did not notably increase, as appears from the following data:

TABLE II. — *Results of Insurance from* 1899 *to* 1903.

Year of business	Year	Number of workmen insured	Premiums liras	Benefits liras
16th	1899	178,439	1,376,005.23	1,075,212.81
17th	1900	202,355	1,546,202.19	1,427,741.15
18th	1901	245,501	1,989,696.59	2,307,341.56
19th	1902	340,256	3,025,689.72	3,426,979.13
20th	1903	421,363	4,286,195.42	4,759,894.29

Meanwhile the opinion gained ground that a reform was necessary, and this reform was brought about by the law of 29 June 1903, No. 243, which extended the obligation to insure to other industries and undertakings. The number of workmen who benefited by this reform rose to a million and a half, and the National Institute experienced a notable increase both of the number of its insured and of its premiums which grew rapidly. Its development from 1904 to 1912 is shown in the following table:

(1) VINCENZO MAGALDI: "La Cassa Nazionale Infortuni" in *Bollettino mensile della Cassa* (Monthly Bulletin of the National Institute), Rome, No. 3, March 1917.

TABLE III — *Results of Insurance from* 1904 *to* 1912.

Year of business	Year	Number of insured workmen	Premiums — Liras	Benefits — Liras
21st	1904	370,198	9,362.425.47	4,991,616.51
22nd	1905	373,570	5,863,481.01	4,411,228.92
23rd	1906	406,183	6,553,461.98	5,714,417.06
24th	1907	436,687	8,286,451.90	6,713,641.22
25th	1908	480,988	10,093,489.89	7,144,298,27
26th	1909	453,094	10,428,035.12	7,987,044.19
27th	1910	447,283	10,085,034.76	7,785,079,21
28th	1911	479,141	10,678,308.35	8,550,895.31
29th	1912	516,710	11,418,460.99	8,848,543.62

But if the premiums increased and the number of the insured workmen was remarkable, balance-sheets were often closed shewing a loss, a circumstance which attracted the attention of the government to the administrative system of the institution.

§ 2. THE NEW ORGANIZATION OF THE NATIONAL INSTITUTE.

Investigations with a view to a new organization of the National Institute were conducted by the government and by a special committee nominated by the Higher Board of the insurance at the meeting of 22 December 1908. The investigations led to a new agreement made on 16 June 1911 between the Ministry of Agriculture, Industry and Trade and the founder institutions and approved by a law of 28 March 1912, No. 304.

The first needed innovation which this second agreement introduced was the transference of the headquarters of the National Institute from Milan to Rome. Its establishment in Milan had been an advantage during its first thirty years of life owing to the neighbourhood of the greater industrial centres of Upper Italy, but the transference of the chief office to Rome was imperative, not only because the central position of the capital made possible the direct supervision of the working of the various offices, which should tend to an increasing development in response to the development of industrial activity throughout the kingdom, but also because more frequent relations with the public authorities were rendered necessary by the new direction of the State's insurance policy.

By the earlier agreement the members of the executive committee of the Savings-Bank of Milan and one representative of each of the founder institutions already mentioned belonged to the Higher Board of the insti

tution. By the new agreement this board included, besides the representatives of the founder institutions, six members nominated by royal decree, namely two representatives of contractors and manufacturers chosen from four names presented by the principal contractors' and manufacturers' organizations, two representatives of the workmen chosen from four names presented by the principal labour organizations, and two members freely proposed by the Minister of Agriculture, Industry and Trade. A representative of the Ministry of Agriculture, Industry and Trade and the director of the Labour Office within this ministry also belong to the board, as by right. The importance of this innovation is clear: the representatives of the founder institutions have a voice on the board as the initiators and first organizers of the National Institute; the delegates of employers and workmen represent the two classes interested in an exact application of the law; and the members nominated by the Minister, the delegate of the ministry and the director of the Office of Labour represent the executive power. In the Higher Board, thus reformed, all the multiple activity of the National Institute in the discharge of its administrative, legal and social duties is reflected. The composition of the executive committee was also modified, being made to consist of the president, the vice-president and five members of the Higher Board, chosen by this latter, including one member chosen from the representatives of contractors and manufacturers and one chosen from the representatives of the workmen. Thus the principle which inspired the reorganization of the board was also followed in the formation of the executive committee which is so important to the good management of the institution (1).

In connection with the new agreement, the royal decree of 5 June 1913, No. 698, also approved new general rules for the National Institute which notably modified the old rules. The new rules provide that it is allowable to admit among the founder institutions, with parity of duties and rights, after the approval of government has been accorded, other institutions or corporations which have subsequently adhered to the agreement. The National Institute is explicitly declared to be subject to the supervision of the Ministry of Agriculture, Industry and Trade. The operations which the National Insurance may undertake, and which are increased in number and notably extended, are more precisely determined. They comprise:

(*a*) Collective insurance by the terms of the law of 31 January 1904, No. 51 (consolidated text), against the accidents of workmen during their work, to include policies of direct insurance and contracts of reinsurance

(1) By Decree No 684 of 1 May 1919 there were aggregated to the Higher Board of the Institute, for as long as it should undertake insurance against the accidents of agriculture two representatives of owners and managers of agricultural and forest holdings and two representatives of agricultural labourers, to be appointed by royal decree and to be chosen, respectively, from four persons nominated by the employers' and four nominated by the agricultural labourers' organizations. For the same period there were aggregated to the executive committee of the Institute a representative of owners and managers of agricultural and forest holdings and a representative of agricultural labourers, both chosen from among the members of the Higher Board.

with trade-unions, private insurance companies or consortia, within the limits fixed by Article 52 of the regulation of 13 March 1904, No. 141 ;

(*b*) Collective insurance of workmen employed on industry and of *agricultural labourers* who are employed by and on behalf of firms, or by persons exempt from the obligation to insure established by the aforesaid law of 31 January 1904, the age-limits being those fixed by the law of 10 November 1907, No. 818 (consolidated text), as to the work of women and children, and policies of direct insurance as well as contracts of reinsurance with the mutual societies being included ;

(*c*) Individual insurances of persons doing manual work, whether by the piece or the day, the age-limits being those fixed by the law of 10 November 1907,

The new rules specify the representative and administrative agents of the National Institute, fix the duties of the Higher Board and the executive committee, the beginning and the duration of the financial year, the rules for the revision of accounts and for fixing the boundaries of the territories within which district and local offices are competent, etc.

The Higher Board determined at its meetings of 28 December 1912 and 14 February 1913 the limits of the competence of the various administrative offices of the National Institute, making a general distinction between three ranks of offices — central, district and local.

The central office comprises the general management, the secretariat, the treasury and stores, the accountant's office, the technical office, the office of statistics and tariffs, the policies and accidents office, the offices of legal consultation and of medical consultation and the inspectorate.

The director general is at the head of all the offices and departments and supervises their regular working.

It is the business of the secretariat to deal with general business and business connected with the staff, to publish the bulletin, to study Italian and foreign legislation and to manage the library.

The treasury and stores office acts as a treasury to the central office, supplies the National Institute with equipment, and is responsible for material in use and furniture.

The accountant's office is entrusted with the general book-keeping, the auditing of the current accounts of the district offices, the accounts of the thrift fund of the staff, and a supervision over the expenditure of the central and district offices.

For the noting of the statistical data sent from time to time by the district offices and for working on these data in order to see that tariffs correspond to risks, there is a special office which transmits statistical and technical information to the Ministry of Industry, Trade and Labour, compiles the five-yearly balance-sheet of the National Institute, and gives instructions and information to the district offices.

The policies and accidents office examines and revises the general terms of policies, issues instructions and sums up facts with regard to the compilation of forms, makes rules as to contracts stipulating the new form

of insurance and as to particular clauses which must be introduced into the various kinds of contracts.

The office of legal consultation deals with all contentious business, whether administrative or legal, and also fixes general and directive principles for the interpretation of the law and the regulation as to accidents. It gives advice in the doubtful cases communicated to it by the various offices and as to appeals and counter-appeals to the Court of Cassation, and it draws up reports to be submitted to the executive committee.

The central consulting physician gives advice on everything in the field of medicine which is connected with the working of the National Institute. He lays down the principles and practice to be followed in estimating disablement, and the practice to be followed in making visits of inspection, making special diagnoses, and tending out-patients who have met with accidents.

Finally, a central inspectorate, of which the staff discharge their functions in accordance with rules enunciated by the general direction and resolved upon by the executive committee, is instituted for the inspection of the various branches of the service in the district offices.

The district organization of the National Institute against Accidents is represented by the district offices of which there were twelve at the end of 1918, namely *Bari* for the provinces of Bari, Foggia and Lecce; *Bologna* for the provinces of Ancona, Ascoli Piceno, Bologna, Ferrera, Forlì, Macerata, Modena, Parma, Pesaro and Urbino, Ravenna, Reggio Emilia; *Cagliari* for the provinces of Cagliari and Sassari; *Genoa* for the provinces of Genoa and Porto Maurizio and the *circondario* of Novi Ligure; *Milan* for the provinces of Bergamo, Brescia, Como, Cremona, Mantua, Milan, Novara (territory left of the Sesia), Pavia, Piacenza, Sondrio; *Naples* for the provinces of Avellino, Benevento, Campobasso, Caserta, Catanzaro, Cosenza, Naples, Potenza, Reggio Calabria, Salerno; *Palermo* for the provinces of Caltanissetta, Catania, Girgenti, Messina, Palermo, Syracuse and Trapani; *Rome* for the provinces of Aquila, Chieti, Perugia, Rome and Teramo; *Siena* for the provinces of Arezzo, Florence, Grosseto, Livorno, Lucca, Pisa, Siena, and Massa and Carrara; *Turin* for the provinces of Alexandria (except the *circondario* of Novi Ligure), Cuneo, Novara (territory to the right of the Sesia) and Turin; *Venice* for the provinces of Belluno, Padua, Rovigo, Treviso, Udine, Venice, Verona and Vicenza; *Tripoli* for Tripolitania and Cirenaica.

These offices are directed by officials known as district directors.

When the office rules of 14 February 1913, which are based on the principle of a decentralization of services, had been approved, and the provisions of the following 1st of July had been applied, all the offices of the National Institute worked on uniform principles.

The district offices are subdivided as follows: (1) management; (2) secretariat; (3) treasury and stores; (4) policies section; (5) accidents section; (6) book-keeping and statistical section; (7) legal consultation; (8) medical consultation; (9) district inspectorate.

In the district offices the decision as to the payment of benefits, when

the matter is disputed by those concerned or there is a difference of opinion between offices, or in the case of fatal accidents, is delegated to a Payments Committee composed of the director and of the consultant lawyer and physician, the head of the Accidents Section also taking part and acting as reporter and secretary of the committee.

The district organization we have described is completed by a local organization formed by secondary offices and agencies. These local offices discharge functions connected with policies, book-keeping, the treasury, accidents, medical service and information, analagous to those of the district offices on which they depend, but their field of action is more restricted. They are managed by National Institute officials of various grades known as the heads of secondary offices. The agencies, on the other hand, are occupied by the demand, whether compulsory or voluntary, for insurance; they receive and make payments as ordered by their respective district offices, and fulfil, in general, the same functions as the secondary offices, but they are managed by persons outside the staff of the National Institute which is connected with them by contract and by disciplinary powers. The field within which the agencies have competency is determined by contract or by an empowering deed and may be a province or a *circondario*. The persons holding the agencies are nominated by a resolution of the executive committee.

By the institution of agencies in the capital towns of provinces and of the principal *circondari* and by means of the vast network of sub-agencies, the National Institute has succeeded in penetrating into and working in the most remote parts of the country.

§ 3. The further development of the National Institute.

The reforms of which we have spoken gave the National Institute a wide and elastic organization. Having transferred its central office from Milan to Rome, it immediately took measures for the better working of its organs, which included, in 1918, 26 secondary offices, 80 agencies, 1924 sub-agencies and 31 travelling doctors. Its health service was also strengthened by a notable number of permanently engaged doctors, doctors occasionally employed and specialists.

Meanwhile, in response to the improvement in the services of the National Insurance and the confidence it inspired, the government and various international agreements constantly imposed on it new and important tasks.

In the period from 1913 the National Institute so extended its activity as to include 23 kinds of insurance. The principal of these were: (1) the compulsory collective insurance of workmen by the terms of the law of 31 January 1904, No. 51 (consolidated text); (2) insurance against civil liability towards workmen, regulated by Article 32 of the aforesaid law; (3) voluntary collective insurance by persons not subject to the law of 31 January 1904, No. 51; (4) optional individual insurance against the accidents of work; (5) compulsory insurance against the accidents of agricul-

tural labour by the terms of the decree-law of 23 August 1917, No. 1450; (6) optional insurance giving greater benefits in case of peasants' accidents; (7) insurance against the diseases of occupations, as resolved by the Higher Board at the meeting of 21 December 1917; (8) collective and individual insurance, compulsory and optional, on an exclusive system, against the accidents of labour in Tripolitania and Cirenaica, by force of the royal decree of 25 May 1913, No. 668; (9) insurance of Italian workmen recruited for work abroad in countries in which the insurance against accidents of foreign workmen is not compulsory, based on the law of 2 August 1913, No. 1075, as to emigration; (10) compulsory and voluntary insurance of seamen; (11) reinsurance of private funds and of insuring consortia and syndicates, according to Article 52 of the regulation of 31 March 1904, No. 141; (12) reinsurance of mutual societies insuring against the accidents of peasants.

Moreover, many State administrations entrust to the National Institute the delicate task of paying benefits for various accidents and give it special mandates. Thus by a resolution of 10 February 1916 the Emigration Commission charged the National Institute to ascertain the consequences of accidents occurring to labourers resident abroad.

The results obtained in five years under the new system of management are shown in the following table.

TABLE IV. — *Results of Insurance from* 1913 *to* 1917.

Year of business	Year	Number of insured workmen	Premiums Liras	Benefits Liras
30 h	1913	534,736	11,143 445.82	10,142,171.93
31st	1914	662,895	13,004,966.56	11,218,086,58
32nd	1915	781,695	16,627,496.24	12,654,683 92
33 d	1916	781.095	25,551,168.48	19,240,744.22
34th	1917	679,736	28,856,944.52	22,644,771 51

The balance-sheets for 1913 and 1914 closed showing a deficit, due to the expenses of installation of new offices and to the fact that the average cost of accidents was somewhat increased by the speculation of persons who exploited the workmen who were victims of accidents, a speculation which gave rise to a long and costly dispute.

Owing to an improvement of the departments the balance-sheet for 1915 also showed an improvement which was emphasized in 1916 and 1917, keeping pace with the marked increase in the amount of the premiums received and the number of workmen insured.

The good financial state of the National Institute appears in the balance sheet for 1917 which was approved by the Higher Board at its meeting of 17 September 1918. Premiums in 1917 amounted to 28,856,944.52 liras;

declared accidents numbered 131,206; reserves set apart amounted to 25,775,950.49 liras, being invested as regarded 23,066,236,10 liras in stock issued or guaranteed by the State, while the remainder was invested in real estate or deposited with the National Institute of Credit for Co-operation or the funder institutions. The profit and loss account showed a balance of 52,293,007.51 liras, that is a net increase of 1,795,474.23 liras.

In 1918 the National Institute issued, through the medium of its district offices, secondary offices and agencies, 33,780 new policies insuring 698,998 workmen; it received 100,720 declarations of accidents; and paid 15,319,449.74 liras in benefits for 103,118 cases of accidents of which 410 were fatal and 7422 produced permanent disablement.

Such is the position of the National Institute at the moment at which it is preparing to assume the management of agricultural insurance.

4. Compulsory insurance against accidents in agriculture.

From what has been said it is clear that the National Institute against Accidents, having ready a vast organization and a numerous administrative and technical staff used to handling its business, and having a large experience which includes the matter of the accidents of agriculture, should be the only institution in Italy in a position to assume, within the least possible space of time, the management of agricultural insurance. This had in fact been entrusted to it by the decree-law of 23 August 1917, No. 1450, but only temporarily and in so far as the mutual societies and other bodies which before 26 March 1917 practised insurance against the accidents of agriculture exclusively or mainly (1) were concerned.

As early as 1911 the statistical and revisory office of the central office published a volume of notes, considerations and proposals as to the new forms of insurance against the accidents of agriculture. In this volume particular consideration was given to agricultural surroundings, the works which should entail insurance, the persons to be included in the insurance, the accidents for which there should be indemnification, the benefits to be paid and the tariff of premiums. A table of benefits not very different from that approved by the decree-law to which we have already referred was approved (2).

By the royal decree of 14 May 1914. No. 457, the National Institute was authorized to afford, as an experiment and with determined tariffs and benefits (3), insurance to labourers employed on farms on works no[t]

(1) These bodies may, by royal decree, be recognized and admitted to carry on their activity temporarily within a determined zone.

(2) See the article in our issue for March 1919, page 121, as to recent provisions for compulsory insurance against the accidents of agriculture.

(3) See in this connection our issue for January 1916, pages 57 *et seq*,

within the scope of the law (consolidated text) of 31 January 1904, No 51. But owing to the slight development of voluntary insurance in Italy notable results were not obtained Some landowners contracted with the National Institute for policies for their employees others, on the other hand constituted for this purpose special mutual societies, on the model of the Vercelli and Florence societies which arose in 1902 and 1908, respectively (1) and reached a high degree of development Meanwhile the movement for the compulsory insurance of agricultural labourers, which arose out of the unjust disparity in the treatment in this respect of field and factory workers, or the increased number of accidents which had followed on the industrialization of agriculture, was constantly accentuated The first bill for such compulsory insurance was introduced in the Senate on 31 January 1907 by Senator Conti, who was a true pioneer where the compulsory insurance of Italian peasants was concerned, and who introduced a second bill taking into account the suggestions made on this important subject by the various agricultural bodies, at the Senate's meeting of 30 March 1909 This bill premised the principle of compulsory agricultural insurance and entrusted the management thereof to the National Insurance against Accidents, exempting from the obligation to insure with this institution landowners, lessees and farmers who should found mutual banks The Conti Bill was amended by the Central Office of the Senate, which granted free choice of the insuring institution, but it was not discussed because in the meanwhile Signor Luigi Luzzatti, then President of the Council and Minister of the Interior together with Signor Raineri, Minister of Agriculture introduced on their own initiative at the Senate's session of 5 December 1910 a bill as to the accidents occuring to workers in the course of agricultural labour

With regard to the insuring institutions, this bill imposed the obligation to insure with the National Institute for Insurance against Accidents on labourers employed on farms directly managed by the State, the provinces or the communes, leaving others a free choice among the private enterprises authorized to insure in Italy But the Luzzatti ministry fell and the bill was not discussed

Afterwards Signor Nitti, as Minister of Agriculture, by a decree of 24 March 1911, nominated a commission which should study the amendments needed by the law on the accidents of labour This commission turned its attention especially to the study of agricultural insurance, drafting a bill which would have entrusted the management of this insurance entirely to compulsory consortia for each of which a district would have been determined by royal decree These consortia would have been obliged to reinsure from 25 to 50 per cent of their risks with the National Institute for Insurance against Accidents, to which a large share of the necessary supervision was given, and on which the management devolved in the case of the dissolution of the consortia But the war supervened and this bill

(1) See the article in our issue for January 1917 on mutual societies insuring against the accidents of agriculture in Italy

did not reach the stage of discussion, for the minister was convinced of the difficulty of forming new compulsory consortia in the state of affairs which had arisen.

Subsequently there was on the part of Signori Borromeo, Venino and Belotti a proposal for parliamentary initiative which was developed and considered by the Chamber on 16 December 1916. It entrusted agricultural insurance to district mutual societies which would have been able to reinsure with the National Institute for Insurance against Accidents. But this proposal did not reach the stage of discussion because soon afterwards, at the session of 26 March 1917, Signor de Nava, the Minister of Trade, Industry and Labour of the time, introduced to the Senate his bill, which was approved by that assembly on 31 July 1917, and promulgated by the decree-law of 23 August 1917, No. 145, which we examined in our March number.

In accordance with the provisions of this decree it has been necessary somewhat to amend the general rules of the National Institute so as to admit four new members into its Higher Board, two to represent the landowners and two to represent the agricultural labourers.

With the division of the kingdom into 35 districts by the lieutenancy decree of 24 November 1918, No. 1890, the organization of the National Institute will be yet further decentralized, for in each chief town of a district the office of a completely autonomous insurance district, directed and supervised by the central office and keeping a special balance-sheet for its agricultural business, will be set up.

Many other innovations in the organization of the offices and staff are being prepared with a view to simplifying and accelerating the working of the National Institute, so that it can discharge in the best possible way the new task entrusted to it by the law.

The medical service will be notably strengthened, both in the central and in the district offices, for new out-patients' departments will be instituted, early and subsequent medical attendance will be more largely afforded to the victims of accidents, and hospitals directly managed by the Institute will be supplied.

Particular attention will also be given to the statistical department, which will be reorganized in accordance with the advice of eminent statisticians and will follow the most modern methods of noting data mechanically.

In fact, a new organization is about to be given to the old National Institute, and will give rise to more intense activity and more vigorous and fruitful energy, which will make of this institution one of the chief organs of modern Italian social legislation.

HOLLAND.

INSURANCE AGAINST MORTALITY AMONG LIVE STOCK

by H M R LEOPOLD

SOURCES

DE NEDERLANDSCHE LANDBOUW IN HET TIJDVAK 1813 1913, (*Dutch Agriculture from 1813 to 1913*) published by the Direction of Agriculture (The Hague) Gebrs J en H van Langenhuysen undated [1914]) pp 225-226

RAPPORT DER COMMISSIE IN ZAKE HET VERZEKERINGSWESEN IN NEDERLAND (*Report of the Commission for the Insurance of Live Stock in Holland*) published by the Society for the Development of Veterinary Science in Holland Extract from "Tijdschrift voor Veeartsenijkunde (*Journal of Veterinary Science*) of 15 June 1914, Vol XLI, Part 12

VERSLAGEN EN MEDEDEELINGEN VAN DE DIRECTIE VAN DEN LANDBOUW (*Reports and Communications of the Direction of Agriculture*), published by the Ministry of Agriculture, Trade and Industry 1916, part 3, p 76 1917 part 3, page 77 1918, part 3, p 71

Throughout the greater part of Holland the peasants' capital consists almost entirely of live stock and since live stock is subject to mortality and sickness it would seem that insurance should have a large development, especially in this country in which the peasants generally know well how to look after their own interests But the facts do not justify this conclusion Insured persons are comparatively not numerous, and the organization of the societies is weak as will appear from what we shall presently state

In so far as is known, the first Dutch mutual societies which proposed to indemnify peasants for the death of their live stock were founded between 1830 and 1833 in the provinces of Overyssel and Guelders There were mutual societies of this kind in North Holland at the same time In 1865 Frisia had 30 societies which had 2,750 members and insured 50 000 cows Guelders 41 societies having 3,227 members and insuring 7 157 cows, and North Holland 6 societies, 1,200 members and 12 000 cows, and in 1878 Holland counted 125 societies Among them some had not the character of true societies, in that they accumulated a reserve and assistance fund by means of voluntary contributions It was only from 1880 onwards — a time of crisis for Dutch agriculture — that insurance against mortality among live stock assumed a larger development There were 213 societies in 1885, and in 1893 there were 390, with a membership of about 30 000 which insured not only cattle but also horses and sheep

In 1906 the situation was as follows Of 300 000 horses 56 814 (19 per cent) were insured for a total sum of 14 791 116 florins by 377 companies having 30,477 members, and these companies paid for 1,692 dead animals benefits equivalent to 1 97 per cent of the insured sum The corresponding figures for cattle were 1,700,000 head, 273,099 head (16 $\frac{1}{2}$ per cent), 17,049 910 florins, 748 companies 72,797 members In eight provinces, 1 78 per cent of the insured value was paid in benefits.

Insurance of pigs existed in only four provinces, those of Overyssel, Guelders, Zealand, and North Brabant, where 14,198 pigs were insured out of 400,000 or 3 ½ per cent., 9,096 being insured by 56 companies having 4,357 members, while in Gueldeis 5,102 pigs were insured by the cattle insurance companies. The 56 companies mentioned paid benefits to their members for 582 pigs (6.4 per cent.).

More detailed figures show how unsatisfactory was the position of live stock insurance in Holland Every member insured on an average 1.9 horses, 3 7 cows, 2.1 pigs and 1.7 sheep or goats. In the sandy district where the peasants own little live stock the mutual societies are much the most numerous. In Drenthe, in 1906, 46 per cent. of the horses and 39 per cent. of the cattle were insured, whereas these respective percentages were 0.7 and 1 7 in Utrecht, 41 and 40 in Limburg and 2 and 2.5 in South Holland. One reason for this phenomenon is to be found in the fact that the propaganda of private insurance companies is more active in some provinces than in others.

Between 1903 and 1906 a certain increase took place, as appears from the following table:

	Animals insured	
	1903	1906
Mutual societies insuring horses . . .	41,410	58,814
» » » cattle	208,309	237,090
» » » pigs	9,609	14,198
» » » sheep . . .	2,053	3,727
» » » goats.	1,506	2,635

The data as to 1906 and 1911 are the following:

	1906	1911
Cattle:		
Number of mutual insurance societies. . . .	748	885
» « animals insured.	273,(79	377 540
Horses:		
Number of mutual insurance societies. . . .	337	523
» » insured animals.	56,814	90,602
Pigs:		
Number of mutual insurance societies.	65	107
» » insured animals.	14,1 8	25,575
Sheep and goats:		
Number of mutual insurance societies	55	137
» » insured sheep	3,727	3,580
» » » goats	2,635	4,904

We give the data showing the position in 1916 the last year in which information was published

) *H*

Provinces	No of societies supplying data	Membership	No of animals insured	Estimated value	No of benefits	Total amount of benefits	Average no of insured animals per landowner	No of benefits paid per 100 insured animals	Amount of benefits per 100 florins of estimated value
				florins		florins			
Groningen	39	4,106	13,809	5,560,360	373	102,833	3.4	2 7	1 85
Friesland	21	6,096	12,379	4,823,125	807	79,945	2 0	2 5	1 47
Drenthe	27	6,761	11,510	4 276,412	267	66,262	1 7	2.3	1 55
Overyssel	60	8,858	12,007	3'241, 31	255	51,244	1 4	2 1	1 58
Guelders	61	5,862	7,744	2,225,104	157	40,291	1.3	2 0	1 81
Utrecht	3	411	588	422 240	24	7,587	1.4	4 1	3 41
North Holland	4	4,304	6,262	4,959 527	158	33,258	1.4	2.5	1 70
South Holland	5	486	1,494	719,300	49	17,168	3.1	3.3	2 39
Zealand	16	2,545	12,-97	6,054,833	432	130,348	4 8	3.5	2 15
North Brabant	12-	12,255	18,170	6,874,683	404	111,952	1.5	2.2	6 63
Limburg	104	5,837	8,228	4,037,294	250	85,356	1 4	8 0	2.11
Holland	538	57,516	104,494	39,994,404	2,676	717,241	1.8	2 6	1 79

(*b*) *Cat.*

Groningen	44	1,682	16,085	3 225 396	358	50 388	5.4	2 2	1 56
Friesland	45	7,142	37,313	7,384 342	952	105 786	5.2	2 5	1 43
Drenthe	67	4,079	50 261	8,164 463	1 008	105 255	5 2	2 0	1 33
Overyssel	98	10,4 0	40,339	6 152,781	772	89 579	3 9	1 9	1 45
Guelders	192	20,284	62,238	9,642,582	1,480	168,348	3.1	2 4	1 75
Utrecht	7	1,295	4 758	755 263	129	16,414	3.7	2 7	2 17
North Holland	74	6 259	72,284	—	1,120	158,111	11.5	1 5	—
South Holland	9	880	6,594	1,502,155	192	36,437	7 5	2.9	2 42
Zealand	12	1,108	8,898	1,518,887	179	22,711	8 0	2.0	1 25
North Brabant	188	16,564	65,765	—	1,319	—	4.0	2 0	—
Limburg	146	11,946	38,524	—	1,010	—	3.2	2 1	—
Holland	882	90,319	403,059	—	8,519	—	4.5	2 1	—

(c) *Pigs.*

Provinces	No. of societies supplying data	Membership	No. of animals insured	Estimated value	No. of benefits	Total amount of benefits	Average no. of animals insured per owner	No. of benefits per 100 insured animals	Amount of benefits per 100 florins of estimated value
				florins		florins			
Overyssel	3	608	1,595	—	122	2,403	—	—	—
Guelders	40	5,324	19,522	—	1,205	28,918	—	—	—
Utrecht	2	93	122	—	15	309	—	—	—
South Holland	1	22	48	—	3	28	—	—	—
Zealand	50	4,404	7,099	—	522	16,447	—	—	—
North Brabant	17	1,765	3 333	—	323	6,833	—	—	—
Limburg	1	57	169	—	15	210	—	—	—
Holland	114	12,273	31,886	—	2,195	55,199	—	—	—

(*a*) Insurance of sheep only; (*b*) of sheep and goats, (*c*) of goats only.

(d) *Sheep and Goats.*

Provinces		No. of societies supplying data	Insured animals: sheep	Insured animals: goats	No. of members	No. of benefits: for sheep	No. of benefits: for goats	Total amount of benefits
Gröninge	*a*	8	1,110	—	860	42	—	1,072
	b	3	212	180	311	13	7	451
Frisia	*a*	30	3,283	—	1,968	220	—	5,084
	b	7	294	424	440	32	27	835
	c	2	—	162	121	—	21	208
Drenthe	*a*	3	347	—	237	15	—	349
	b	16	371	1,700	1,044	34	193	2,387
	c	7	—	569	309	—	62	542
Overyssel	*a*	1	77	—	32	5	—	125
	b	6	254	939	625	10	82	1,051
	c	13	—	1,946	1,124	—	138	1,267
Guelders	*b*	2	7	452	305	1	36	392
	c	21	—	1,627	1,077	—	144	1,351
North Holla	*c*	1	—	60	36	—	10	117
South Holland	*c*	1	—	613	43	—	10	91
Zealand	*c*	3	—	147	116	—	6	64
North Br	*c*	8	—	745	496	—	57	481
Limburg	*c*	7	—	919	602	—	109	1,083
Holl	*a*	12	4,81	—	3,097	282	—	6,630
	a	34	1,138	3,695	2,725	90	345	5,114
		63	—	6,288	3 924	—	557	5,254

Among these mutual societies there is no trace of any central organization, and therefore the greatest variety reigns as to the payment of premiums, the amount of benefits, the rates and the contributions. While most of them are independent societies, there are also — especially in the south of the country — societies founded by rural leagues which help them even in their management. Since they do not practice reinsurance, premiums have to receive extra supplements in years of high mortality. In most cases, however, societies have safeguarded themselves against exceptional loss by determining not to grant benefits in cases of infectious illnesses, war, floods, etc. The same society insures horses and cows only rarely. A more frequent combination is that of horses and pigs.

For horses the premium varies from 1.5 to 3.5 per cent. of the insured value, and the sum paid in case of death is 70 or 90 per cent. of such value. The percentage is fixed by a committee nominated from among the members. There is no case of the existence of a reserve fund.

In the case of cows insurance is limited almost exclusively to milch-cows and cows with calf. The percentage of value paid as benefit is not fixed in all cases and in some cases is fixed only after the animal's death. Certain mutual societies pay the veterinary surgeon, especially when he is called in at a birth, in order to encourage the peasants to make use of his services in cases of difficult parturition. The benefit varies from 75 to 90 per cent. of the value. Funds are obtained either by levying a percentage of value established on the basis of the losses suffered, or from fixed premiums, or by obliging the members to buy the animals' meat at prices fixed by tariff. The fixed premium is generally from 1 to 2 per cent. of value. The mutual societies often have a reserve fund which is reconstituted by an extraordinary addition to premiums.

Mutual societies insuring pigs are found especially in Zealand and Guelders ; the benefit is calculated on the basis of the dead or seized animal's weight ; the annual premium varies from 1 75 florins to 2.50 florins.

The members of mutual societies insuring sheep and goats are almost always labourers or peasants owning very little live stock. The premium varies from 4 per cent. to 13 per cent., mortality being very high — from 5 per cent. in some years for sheep to 10 per cent. for goats.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES

ARGENTINE REPUBLIC

INSURANCE AGAINST HAIL IN 1917-18. — *Report presented to the Minister of Agriculture by Dr. Lahitte, Director of the Office of Rural Economy and Statistics.* — Buenos Aires, 21 January 1919.

Noteworthy business was done in 1917-18 in the Argentine by companies insuring against hail.

From a report presented by Dr. Lahitte, director of the Office of Rural Economy and Statistics at the Ministry of Agriculture, it appears that the number of insurance companies having the form of limited liability and mutual societies and assuming risks of this kind was 36 and that they insured the property of 47,047 persons covering an area of 5,597,648 hectares. The number of policies these companies issued was 48,017; they insured the total sum of 183,654,386 pesos; premiums received amounted to 9,807,277 pesos and benefits paid to 1,012,626 pesos.

The following table classifies these data, distinguishing the limited liability or prevailing form of company from the mutual societies. Later we also notice whether the offices of the companies are situated in the Federal capital or in the interior.

	Limited liability companies	Mutual companies	Total
No. of companies	21	15	36
No. of insured	39,311	7,736	47,047
No. of policies	39,439	8,578	48,017
Hectares insured	4,419,566.29	1,178,082	5,597,648 29
Value insured in pesos (National money)	144,586,905.89	30,067,480.43	163,654,386.32
Amount of premiums	8,195,383.48	1,611,893 91	9,807,277 39
Amount of benefits	723,107.77	289,518.97	1,012,926.74

From Dr. Lahitte's report it appears that the most important mutual societies are active in the south of the province of Buenos Aires, at Tres Arroyos, Pigué, Juárez, Puán, Coronel, Suárez and Guamini, and have alone carried on operations over an area of 1,070,649 hectares, out of the 1,178,082 hectares which form the total area insured by all the mutual societies.

Comparing the insured value, which is 183,454,386 pesos, with the insured area, which is 5,597,648 hectares, we find that the average sum insured per hectare is 32.80 pesos, which represents about two thirds of the value of an ordinary harvest. The average premium paid is, as appears from the figures in our table, 5.34 pesos; the average benefit paid by the companies is 0.56 per cent. of the insured capital. Benefits constitute, on an average, 56 per cent. of gross premiums.

The agricultural year 1917-18 was, as appears from the figures given above and those in the following table, which contains data referring to previous years exceptionally favourable to insurers; for falls of hail were so rare that the area injured by hail was barely 4 501 hectares, that is 0.10 per cent. of the total insured area.

	Year 1912-1913	Year 1914-1915	Year 1917-1918
Number of societies	31	29	36
Number of the insured	—	29,361	47,017
Number of policies	—	32,039	48,017
Insured hectares	4,388,553	4,535,154	5,597,648 29
Insured value in pesos (in	153,675,470	142,151,891 —	183,654,386.21
Amount of premiums (pesos n.m.)	8,446,409	7,678,063.13	9 807,277.39
Amount of benefits (pesos n.m.)	4,329,605	4,423,086.53	1 011,626.74

Although the constitution of companies insuring against losses by hail is recent, these companies have undoubtedly attained to a notable and promising development which has been favoured by the circumstance that the institutions of credit do not grant agricultural loans for seed or other purposes if the land sown is not insured against hail. In the following table we show the percentage of the sown area which is insured, distinguishing among the various kinds of crops.

	Area sown	Area insured	Percentage
	hectares	hectares	
Wheat	7,234,000	4,565,734	63.16
Flax	1,308,000	669,414	51.70
Oats	1,295,000	333,904	25.50
Other crops	363,860	30,594	8.40
Total	10,201 460	5,597,646	5 %

Having regard to the total area insured, which is, as we have said and as appears in the above table, 5,597,646 hectares, it can be deduced that the area planted with wheat represents 81.50 per cent. of the total insured area, that planted with oats 12 per cent., that planted with flax 6 per cent., and that under various crops 0.50 per cent., as follows:

Wheat	4,563,734 hectares	81.50	per cent
Oats	669,414 hectares	12	per cent.
Flax	333,904 hectares	6	per cent.
Other crops	30,594 hectares	0.50	per cent.

From Dr. Lahitte's report we also can find what percentages are constituted by the heaviest premiums in the districts most subject to storms. In the case of wheat, flax and oats this percentage goes from a minimum of 3.5 and 4 5 in the province of Buenos Aires to 6, 7, 8, 9, 10 and 12 in the province of Córdoba. The percentages of 10 and 12 refer to the departments of Juárez Celman, Tercero Arriba, Río Segundo and Río Cuarto in this province.

In the province of San Luis the percentage is 6 only in the departments of La Capital and Buena Esperanza, in the others 8, 9 and 10.

In the case of lands planted with oats and turnips the percentage of premium follows the course of that due on lands under the other crops we have mentioned, but reaches 10 and 15.

FRANCE

INSURANCE AGAINST HAIL IN 1918. — *L'Argus*, Paris, 8 June 1919.

The year 1918 belongs to the class of average years, benefits having been equal to 61 per cent. of premiums, as against 141 per cent. in 1917.

The number of the insured is, on the whole, stationary, a fact explained by the state of war. On the other hand an important increase in the insured value is to be noticed.

TABLE I. — *Hail Insurance Companies and Societies in* 1918.

	Stock Companies	Mutual Societies	Total
Number of the insured	40,232	103 226	193,458
Insured value	francs 649,398,955	francs 972,330 310	francs 1,621,720,265
Premiums or subscriptions in 1918	12,187,208	11,587,913	23,775,121
Benefits and costs of settlements	6,446,466	8,308,952	14,755,418
Commissions and general costs.	2,793,985	nil	2,793,985
Profit of the year	2,038,557	1,397,655	3,436,212
Reserve fund at end of year. .	4,264 791	14,488,343	18,753,134

This latter fact merely reflects the increase in the price at which crops sell. It has caused an increase of more than seven and a half million francs in premiums and subscriptions.

If we compare the stock companies and the mutual societies we can resume the year as in the table on page 379.

TABLE II. — *Development of Hail Insurance from* 1888 *to* 1918

Year	Insured persons	Insured value	Premiums and subscriptions	Benefits	Profit or loss	Reserve fund at end of year
	francs	francs	francs	francs	francs	francs
1888	126,001	58,08[illegible]810	7,113,927	6,726,578	— 845,014	1,105,543
1889	122,085	652,254,913	7,[illegible]196	4[illegible]2,453	+ 1,851,056	2,[illegible]2 439
1890	[illegible]1,213	602,834,132	8 044,770	5 655,384	— 2,330,831	3,631,858
1891	129,441	532,782,068	7,116,061	4,017,024	+ 1,083,917	4 114,411
1892	134,816	567,428,604	7,[illegible]26,258	5,028,168	+ 1,290,512	4,75[illegible]842
1893	132,760	542,976,689	7,35[illegible],725	5,020,863	+ 998,9[illegible]6	1,900 [illegible]4
1894	133,281	591,849,895	7,949,069	3,558,453	+ 2,847,771	6 858,345
1895	117,171	509,190,442	7,797,317	9,210,359	— 2,614,735	,950 267
1896	114,864	492,500,342	7,568 987	4,393,037	+ 1,291,971	4,774 106
1[illegible]97	115,440	514,353,420	7,411,530	7,624,821	— 1,622,564	3,494 334
1898	151,101	718,7[illegible]3,943	9,163,689	2,763,914	+ 4,241,371	6,615,446
1899	146,250	639,063,026	8,737,095	6,498,150	+ 576,390	6,715,329
1900	151,017	634,9[illegible]0,908	8,897,943	6,714,908	+ 423,149	6,731,563
1901	156,375	656,72[illegible],570	9,375,281	6,167,216	+ 1,516,885	7,395,245
1902	161,228	705,638,179	9,017,442	6,119,884	+ 1,245,246	8,330,047
1903	1[illegible]8,313	740,611,718	9,938,811	4,174 547	+ 3,751,780	10,3[illegible],289
1904	1[illegible]4,38[illegible]	749,441,949	9,935,929	5,200,296	+ 2,822,197	12,213 988
1905	155,399	723,783,297	9,085,871	6,981,017	— 877,486	13 108 122
1906	171,749	806,407,813	9,954,397	3,369,051	+ 4,465,886	14,182,540
1[illegible]07	172,399	824,8[illegible]0,424	9,750,045	3,834,687	+ 3,814,315	17,2[illegible]1,082
1908	176,951	844,440,339	11,097,993	14,015,787	— 3,137,511	17,950,000
1909	178,[illegible]37	880,119,939	10,432,995	4,780,424	+ 3,875,440	16,10[illegible],692
1910	195,816	948,886,532	11,779,914	7,607,373	+ 1,827,260	13,430 [illegible]57
1911	203,850	965,595,599	12,074,442	8,019,939	+ 1,803,365	14,636,941
1912	206,134	1,011,828,865	12,769,102	8,240,589	+ 2,135,105	15,869,659
1913	226,616	1,111,915,867	14,165,017	7,[illegible]06,173	— 3,729,352	18,898,222
1914	226,342	1,043,503,005	14,414,013	7,188,368	+ 2,652 999	19,602,824
1915	201,859	927,128,713	12,861,733	6,311,446	+ 1,708,037	23,[illegible]46,462
1916	198,310	933,510,419	13,591,365	9,850,359	+ 228,857	23,644,005
1917	196,938	977,210,121	16,036,121	23,672,9[illegible]0	— 9,364 333	15,171,945
1918	193,458	1,621,729,265	23,775,121	14,755,418	+ 3,436,212	18,753,134

The development of insurance against hail in France since 1888 is shown by the preceding figures in which the results obtained by the stock companies and the mutual societies are blocked.

SPAIN.

STATE INSURANCE OF CROPS AGAINST FIRE AND HAIL. — Royal decree authorizing the Official Committee of Marine Insurance to insure (separately or jointly) or to reinsure, on behalf of the State, risks of crops from fire, from whatever cause it may arise. *Gaceta de Madrid*, Year CCLVIII, Vol II, No. 101. Madrid, 11 April 1919; royal order containing regulations for carrying out the insurance and re-insurance of crops. *Gaceta de Madrid*, Year CCLVIII, Vol. II, No. 120. Madrid, 30 April 1919.

In 1917, by royal decree of 23 March, there was established in Spain a special committee called the Official Committee of Marine Insurance, consisting of technical experts and representatives of the national economy, and having the object of organizing and developing marine war insurance. Later on, when the inter-relation between war risks and the ordinary risks of navigation had become clear, the committee was authorized to re-insure, on behalf of the State, a part of the ordinary marine risks insured by Spanish undertakings legally constituted, partly in order that the insurance companies might be able to count at any time upon being able to re-insure all the excess risks which they held and partly as a step towards the nationalization of insurance. The relations thus brought about between the committee and the private undertakings developed to such an extent that, even after war risks had been almost completely eliminated, the private undertakings continued to re-insure with the State a considerable part of the ordinary risks of navigation.

In view of the satisfactory results achieved and of the resolutions passed by the representatives of the principal national interests, and in conformity with recent economic and social tendencies, the Spanish Government thought fit to enlarge the scope of the official committee in relation to the defence of the national wealth. Accordingly, by royal decree of 10 April of the present year, the committeee has been authorized to insure (separately or jointly) or to re-insure, always on behalf of the State, the risks of crops from fire, from whatever cause it may arise, and to re-insure such portions of the risks of crops from hail as may be handed over to them by mutual insurance undertakings legally constituted. In this decree it is laid down that the risks directly insured by the committee shall not exceed four fifths of the value of the crop and that it may, if it think fit, partially re-insure or hand back any risks which it may have insured in any of the operations which it may undertake.

Subsequently, by royal order of 28 April, regulations, which we will now set forth, for carrying out the decree were made.

Insurance of Crops against Fire. — The object of this insurance will be the payment of compensation for the material losses suffered by the

crops through the direct action of fire and the other damages comprised in section 393 of the Commercial Code (1).

The State will guarantee the insured person against the consequences of fire even when it arises from military operations in case of war, from volcanic eruptions, earthquakes, or popular tumults. By popular tumult will be understood "any rising of the people, such as riot, rebellion or sedition, in which, the principle of authority being disregarded, order is seriously disturbed". The State will not guarantee against damages by fire which has been caused by the criminal act of the insured party.

The Official Committee of Marine Insurance may issue policies insuring against risks from fire, from whatever cause it may have arisen, or policies which insure only against fires caused by military operations, volcanic eruptions, earthquakes or popular tumult.

It will be within the competence of the Official Committee of Marine Insurance to determine the general and special conditions of the policies and to fix the premiums payable.

In case of damage by fire, the committee must send representatives (delegates, officials or experts) to the place where it occurred within the thirty days following the receipt of the official notification.

When it is a case of fire caused by military operations, volcanic eruption, earthquake or popular tumult, the experts must determine not only the cause of the fire but also the damages produced exclusively by the fire, and fix accordingly the compensation to be paid by the State.

In all cases the compensation fixed by the experts must be paid to the insured person within a period of ten days beginning from the day following that upon which it was agreed to by the committee.

If it be possible, the committee must re-insure up to 90 per cent, all the risks which it may directly insure.

Re-insurance of the Risks to Crops from Fire. — The official committee, in the name of the State, shall have power to arrange with insurance companies duly registered in the Register of the Ministry of Fomento, for the re-insurance of crops against fire: (1) by means of an obligatory contract in which case the liability of the State may begin, according as may be agreed, on the day on which each policy re-insured takes effect, whatever may be the date on which the giving of the insurance may be intimated to the committee, even if, at the time of doing so damage has already been incurred, or it may begin at 12 o' clock on the day in which the application for re-insurance is made and the letter containing it is posted; (2) by an optional contract, proposals being made in regard to specific policies, in which case the right will be reserved to the committee to accept or to reject the re-insurance proposal, and the re-insurance will take effect from the date on which the acceptance of the proposal has been notified

(1) The damages which the section particularly mentions are: (1) the expenses incurred by the insured person in carring away goods with the object of salving them; (2) the loss of value which the goods salved may suffer; and (3) the damage caused to the property insured by the means adopted by the authorities for restricting or extinguishing the fire.

to the company. The re-insurance must be carried out in all cases at the same premiums and subject to the same rules and conditions, both general and special, as are contained in the policy signed by the insured party, and when a single risk is covered y more than one policy re-insurance can only be effected on the combi e poicies.

The committee, in the name of the State and as its representative must repay the agreed proportion of the compensation paid by the insuring company, within the eight days following the receipt of the application accompanied by the necessary vouchers.

The committee is authorized to fix the re-insurance commission which is to be paid to it by the company re-insuring, but in no case must this exceed 30 per cent. of the premium. In the case of contracts of compulsory re-insurance the committee can also allow a share in its profits, which must not exceed 10 per cent. The bonuses can only be given to companies inscribed in the register of the Ministry of Fomento and on the conditions which the committee considers most suitable in the interests of the State.

Re-insurance of the Risks of Crops from Hail. — The Official Insurance Committee can accept, in the name of the State, proposals made by undertakings legally constituted for the re-insurance of crops against risks from hail. The committee is authorized to determine the crops which may be so re-insured.

When the risk re-insured has been originally insured by the payment of a fixed and unalterable premium, the re-insurance will be effected at the original premium and on the same conditions, general and special, as those of the insurance contract. If the principle of mutuality has been adopted the losses being divided amongst the members of the society, or if the insurance has been effected by the payment of a provisional premium, the Official Committee of Marine Insurance will fix the premium which will have to be paid for the re-insurance, as far as the portion re-insured is concerned.

The re-insurence will affect, in the proportion agreed upon, the whole of the risks insured in any one year by the company or society or, at the least, all the risks with respect to one particular crop which it may have insured.

Administration. — With respect to the insurance of crops in general, the Official Committee of Marine Insurance will be represented in the provinces by the Inspectors of Agriculture, who will furnish to each proprietor or tenant of cultivated lands who desires to insure his crops printed forms on which to make the insurance proposals. Upon receiving a proposal, the Inspector of Agriculture of the district will set out in the form the premium payable in accordance with the instructions and tariffs with which the Official Committee have supplied him, and will forward an order for the payment of the amount into the public funds. As soon as the insured person presents the voucher acknowledging the receipt by the treasury of the premium paid, the Inspector of Agriculture will sign the insurance policy in duplicate, will hand one copy to the insured person, and will forward the other to the committee accompanied by the original proposal and the voucher.

The Official Committee of Marine Insurance will fix the remuneration payable to the Inspectors of Agriculture for the duties performed. All the expenses arising from the operations of insuring and re-insuring crops, as well as the compensation in case of damage, will be paid out of special credit opened by the State for the purpose.

Lastly, the royal order of 28 April lays down that the regulations shall be applied and interpreted by the committee, which will also have the right to propose to the Ministry of Agriculture such supplementary regulations as it may deem desirable.

SWEDEN.

MUTUAL INSURANCE AGAINST HAIL IN 1917. — *Sveriges officiella Statistik Enskilda försäkringsanstalter år 1917 av försäkringsinspektionen* II Stockholm, 1919

In 1917 the receipts of mutual societies insuring against hail reached the following figures:

Premiums	187,790.48	crowns
Interest on invested funds	5,672.13	»
Other income	359.16	»
	193,820.77	crowns

Balancing these receipts with the expenditure, we obtain a credit balance of 53,740.98 crowns, as follows:

Benefits, including costs of settlement	75,147.16	crowns
Costs of management	60,643.84	»
Transferences	3,785.99	»
Other expenditure	502,80	»
Credit balance	53,740.98	»
	193,820.77	crowns

The assets for the year were as follows:

In hand	4,773.03	crowns
In the bank	167,710.46	»
In public funds	4,200.28	»
Carried over from previous years	38,295.05	»
To be recovered from previous years	54,145.42	»
Chattels	3,032.25	»
Various	1,279.87	»
	273,436.36	crowns

Liabilities were as follows:

Reserve fund	263,796.43	crowns
Sums borrowed	8,614.30	»
Various	1,025.63	»
	273,436.36	crowns

At the end of the year 27,772 contracts were current and they covered risks valued at 110,550,618 crowns. Indemnified losses numbered 334, the largest benefit paid being one of 7,253.25 crowns.

The following figures show the rate per thousand crowns of insured capital of the premiums received by the various mutual societies practising insurance against hail:

Allmänna Hagelskadeförsäkrygsbolaget	2.96
Uppsala läns	3.00
Östergotlands läns	1.50
Skåne-Hollands	6.00
Alvsborgs m. fl. läns	4.00
Skaraborgs läns	2.00
Örebro läns	1.00
Västmanlands läns	3.50

Part III: Credit

ARGENTINE REPUBLIC.

MOVEMENT OF THE SALES AND MORTGAGES OF RURAL PROPERTY IN THE THREE YEARS FROM 1915 TO 1917

SOURCES:

ESTADÍSTICA AGRÍCOLA 1916-1917 (Agricultural Statistics 1916-1917), Dirección General de Estadística y Economía Rural, Ministerio de Agricultura de la República Argentina. Buenos Ayres, 1918.

RURAL REAL ESTATE SALE AND MORTGAGE TRANSACTIONS, in *The Review of the River Plate*, Buenos Ayres, December 1918.

In this review we have on other occasions dealt with the movement of the sales and mortgages of rural real estate in the Argentine Republic down to the year 1915. The last number of the Yearbook of Agricultural Statistics, published by the care of the Argentine Ministry of Agriculture, and a report which was presented to this ministry by Dr. Lahitte and is reproduced in the number of *The Review of the River Plate* cited above, now give us data on this subject for 1916 and 1917. We will therefore resume our examination of this movement which indubitably gives the most important index of the present economic situation of the republic.

§ 1. SALES OF RURAL REAL ESTATE IN THE THREE YEARS FROM 1915 TO 1917.

We reproduce the data as to the sales of land in 1915, 1916 and 1917.

From this table it appears that the area of the lands sold in 1916 exceeded by 450,990 hectares the area sold in the previous year, while the area sold in 1917 was less by 224,150 hectares than that sold in 1916.

The increase found in 1916 is therefore undoubtedly due to transitory and occasional causes, for, as we have noted in other numbers of this review, a marked diminution with the progress of time of the area sold has always shown itself in the republic. If we compare the figures for the last three with those for the preceding years, going back, for instance, to 1905, in which year the maximum area, namely 16,290,947 hectares, was sold, we find that from that year the area sold diminished until 1909, rising again in the years from 1909 to 1911, and then falling constantly, except in 1916, until the last year we have examined.

TABLE I. — *Area and Value by Provinces and Territories of Lands Sold in* 1915, 1916 *and* 1917.

Provinces and territories	1915			1916			1917		
	Hectares sold	Value pesos nm. (1)	Value per hectare pesos nm.	Hectares sold	Value pesos nm.	Value per hectare pesos nm.	Hectares sold	Value pesos nm.	Value per hectare pesos nm.
Buenos Aires	524,279	70,015,007	133	849,315	121,242,671	142.7	515,589	74,074,093	143.7
Santa Fé	596,779	46,719,115	78	672,643	62,081,031	92.2	691,043	51,775,868	74.9
Córdoba	435,796	32,189,246	73	595,432	50,265,706	84 4	891,352	65,622,825	73.5
Entre Ríos	92,258	6,477,505	71	94,131	6,496,671	69	138,299	8,866,029	64 1
Corrientes	2,036	87,331	42	3,511	133,830	38.1	20,851	798,434	38.2
Tucumán	44,556	2,123,938	47	27,582	3,756,649	136.1	29,592	1,903,055	64
Mendoza	918,308	18,800,342	20	537,670	17,351,247	32 2	471,161	19,636,370	41 6
San Juan	94,040	2,012,398	21	90,943	1,258,295	13	29,514	2,481,080	84
San Luis	172,758	4,667,693	27	912.126	9,588.934	30.7	204,159	5,227.756	20.7
Santiago del Estero	476,940	3,333,722	69	350,536	5,276,587	15	440,969	4,776,665	10.8
La Rioja	74,930	343,073	4.5	232,257	378,237	1.6	158,124	218,144	1.3
Salta	101,571	3,298,462	32	585,853	3,029,131	5.1	262,050	4,184,513	15.8
Jujuy	40,091	221,150	5 5	18,786	192,9 6	10.2	30,638	282,590	9.2
Catamarca	271,955	534,493	1.9	250,629	731,880	2.9	239,875	836,142	3 4
Central Pampas	402,267	12,602,723	31	434,778	12,946,675	29.7	431,424	9,912,221	22.9
Río Negro	242,092	2,887,077	11.9	82,443	1,630.976	19.7	146,759	2,349,019	16
Neuquén	132,749	481,451	3.6	87,632	751,501	8.5	86,174	640,626	7.4
Chaco	88,101	1,762,139	19	210,565	1,962,428	9.7	160,023	3,308,263	20.6
Misiones	11,918	226,578	19	825	66,360	80.4	8,508	107,096	12.5
Formosa	2,373	36,481	15	1,493	11,500	7.7	230	29,500	12.8
Chubut	331,916	1,716,423	5.1	350,989	1,667,982	4.7	512,368	3,492,515	6 8
Santa Cruz	632,942	5,550,135	8.7	535,053	4,994,362	9 3	187,802	2,577,857	13.7
Tierra del Fuego	189,309	1,835,135	9.7	15,402	61,607	3 9	—	—	—
Los Andes	—	—	—	—	—	—	—	—	—
	5,880,654	217,921,627	37.5	6,340,644	305,877,186	48.2	5,656,504	263,100,652	46 5

But if the area sold constantly diminished, there was on the other hand a noticeable and reassuring increase in the value of land. Thus, while 16,290,947 hectares were sold in 1905 for 232,623,453 pesos nm., the area of 13,701,934 hectares was sold in 1910 for 359,024,595 pesos. And this increase continued in subsequent years, reaching in 1915-1917 the level shown in the figures we have reproduced. Thus the value per hectare rose from 14.27 pesos in 1905 to 30.85 pesos in 1909, 35.59 pesos in 1911, 37.05 pesos in 1915 and 46.5 pesos in 1917.

Dr. Lahitte, in his report which we have examined, also arrived at these results when considering the two triennial periods, 1909-1911 and 1915-1917. He observes that in the first of these periods in which, as we have already noted, the number of hectares sold was already noticeably on the increase, conveyances of a total area of 33,423,574 hectares, having the value of 1,020,372,878 pesos nm. or an average of 30 pesos a hectare, were made ; but that in the second triennial period, that from 1915 to 1917, there were conveyed only 17,877,802 hectares, of the value of 786,899,465 pesos nm., or 44 pesos a hectare on an average. Dr. Lahitte attributes the increase during the latter period in the value of the lands to a more exact estimate of the yield of the soil by purchasers and to the cessation of the speculation which had reigned in the previous period.

§ 2. Classification by area of lands sold.

Beyond the noticeable and constant increase in the value of the lands sold in recent years, due principally to the reasons we have noticed but undoubtedly also caused by the complex and multiform economic progress of the republic and by other agents of a general character, such as the development of systems of irrigation, the extension of railways, the greater amount of capital which credit has made available for colonists, etc., the data we have given show that that there has been a decided progress towards the subdivision of land, which subdivision constitutes, as is known, the best means for solving the problem of colonization.

In the two following tables we show, by area, the sales of rural real estate, in the first of them the total sales for the whole territory of the republic, in the second those for each province.

The data we have reproduced amply support the statement that there is a tendency to subdivision, for the sales of small holdings made in 1916 surpass those made in 1915.

It is true that in 1916 the total area sold was, as we saw in Table I, notably in excess of the area sold in 1915, so that the presumption is that there was a larger number of sales ; but Table II shows that while the number of the properties of more than 1,000 hectares which were sold remained stationary, the increase in the number sold became noteworthy and gradually rose as the properties affected became less extensive, and in the last three classes the difference is one of 300, 406 and 600.

TABLE II. -- *Number of properties sold, by area.*

Area of properties	1915		1916	
	No. of properties	Total area hectares	No. of properties	Total area hectares
From 1 to 25 hectares . . .	4,160	40,286	4,781	42,608
» 26 to 50 »	1,329	52,685	1,784	67,492
» 51 to 100 »	1,392	107,895	1,614	124,507
» 101 to 150 »	634	78,390	876	108,709
151 to 200	503	90,444	569	101,859
201 to 250	291	65,090	335	74,087
251 to 300	250	68,307	257	71,234
301 to 400	272	94,508	347	121.421
401 to 500	179	81,852	229	104,395
501 to 1,000	864	311,260	523	347,336
More than 1,000 »	884	4,879,867	882	5,144,996
Total . .	10,418	5,880,654	12,202	6,340,644

In any case, the results obtained from the data reproduced are completed and supported by those which refer to 1917. The Yearbook of Agricultural Statistics does not cover that year and our data regarding it are therefore incomplete. But the existence of the tendency in question is confirmed by Dr. Lahitte's report which resumes, by areas sold, the movement of sales.

The properties sold in 1917 which had an area of less than 25 hectares numbered 5,147 and extended over 47,930 hectares. Most of the sales of these small holdings were in provinces which have a considerable number of urban centres of population or in which cultivation is comparatively intensive. Thus in the provinces of Buenos Ayres, Córdoba and Santa Fé, which have altogether 65 urban centres of from 5,000 to 10,000 inhabitants each, out of a total of 76 such centres in the whole country, 2,709 holdings of less than 25 hectares were sold; in the provinces of Tucumán, Mendoza, Santiago del Estero and Catamarca the number sold was 1,717: the total number sold was therefore 4,426.

In the provinces of Buenos Ayres, Córdoba and Santa Fé subdivision is undoubtedly chiefly caused by the nearness of the lands to consumers' markets, while in the other provinces it may be attributed to the kind of cultivation which prevails in these districts and to the systems of irrigation which have been largely developed in them.

It should be noted that those properties sold in 1917 which had an area between 26 and 300 hectares and could not be taken to be large properties,

and were generally situated in districts given up to grain growing, represent 41 per cent. of the total rural real estate sold in the republic.

TABLE III. — *Sales of rural properties, by area for each province, in* 1916.

Provinces and territories	From 1 to 25 hectares		From 26 to 50 hectares		From 50 to 300 hectares		Above 301 hectares		Total	
	No of properties	Area hectares	No of properties	Area hectares	No of properties	Area hectares	No of properties	Area hectares	No of properties	Area hectares
Buenos Aires	1,180	14,585	545	20,561	949	124,942	568	689,247	3,242	849,315
Santa Fe	469	8,432	477	17,587	985	120,730	250	520,954	2,179	672,643
Córboba	987	8,677	298	11,230	870	118,626	364	646,719	2,519	595,432
Entre Rios	198	2,282	122	4,634	218	26,756	66	60,432	604	94,131
Corrientes	—	—	—	—	3	662	3	2,849	6	3,511
Tucuman	397	2,068	19	791	17	2,605	8	22,118	441	27,582
Mendoza	738	5,124	94	3,479	122	13,903	64	515,164	1,018	537,670
San Juan	115	537	11	361	24	2,718	7	87,327	157	90,943
San Luis	217	1,859	77	2,891	149	20,390	153	287,031	596	312,173
Santiago del Estero	107	917	25	1,082	82	11,746	105	336,791	319	350,536
La Rioja	10	121	2	94	16	1,735	20	230,307	48	232,257
Salta	7	45	1	32	6	744		585,032	36	585,853
Jujuy	12	91	3	116	3	324		18,253		15,786
Catamarca	136	894	13	512	21	2,299	39	246,924	209	250,629
Central Pampas	154	1,415	71	3,052	127	19,544	146	410,767	499	434,778
Rio Negro	21	164	13	573	23	2,784	18	78,922	75	82,443
Neuquén	2	35	—	—		146	14	87,451	17	87,632
Chaco	17	203	4	169	19	2,575	26	207,618	66	210,565
Misiones	5	89	2	100	3	275		361		825
Formosa	—	—	—	—	3	493		1,000	4	1,493
Chubut	9	90	6	288	12	1,365	65	349 216	92	350,989
Santa Cruz	—	—	—	—			45	535,246	41	535,053
Tierra del Fuego	—	—	—	—			2	15,402	2	15,402
Total	4,781	47 608	1,784	67,492	3,651	480,396	1,986	5,745,148	12,202	6,340,644
	4 160	40,286	1,389	52,685	3,070	413,964	1,799	5,377,487	10,418	

§ 3. MOVEMENT OF MORTGAGES IN THE THREE YEARS FROM 1915 TO 1917.

To complete the data we have given and support our deductions therefrom, it is necessary to examine the movement of the mortgages with which rural real estate has come to be burdened in the three years which occupy us. Our data for 1917 are not complete as they are for the two preceding years. In the following table we reproduce data only for 1915 and 1916, but we

will afterwards compare them with the available data for 1917, which, fragmentary though they be, suffice to show the movement of mortgages in that year.

TABLE IV. — *Mortgages of Rural Real Estate in* 1915 *and* 1916.

Provinces and territories	1915			1916		
	Area mortgaged hectares	Value pesos nm.	Value per hectare pesos nm.	Area mortgaged hectares	Value pesos nm.	Value per hectare pesos nm.
Buenos Ayres	853,881	46,077,163	53 9	1,270,185	83.428,042	67 2
Santa Fe.	335,466	14,926,195	44.4	304,010	16,594,479	54.5
Córdoba	727,135	26,746,192	36,7	715,129	32,869,482	45 9
Entre Rios.	125,756	3,364,518	26,7	90,323	3,136,680	34.7
Corrientes	1,487	30,500	20.4	8,441	140,933	16 6
Tucumán.	62,507	2,250,122	31 9	50,314	4,173,157	82 9
Mendoza	1,079,687	14,844,732	13 7	336,086	10,534,083	31.3
San Juan.	57,672	763,425	13 2	162,134	763,415	4 7
San Luis	171,137	4,292,341	25	193,205	2,976,125	15 4
Santiago del Estero	316,663	3,635,684	17.5	207,857	1,812,134	8 6
La Rioja . . .	6,033	50,881	8.4	6,755	60,917	8 7
Salta	138,963	4,754,546	34.1	162,575	1,740 374	10 7
Jujuy	6,152	137,322	22.3	659	108,417	16 4
Catamarca . .	48,559	81,173	1.6	66,874	156,371	2.3
Central Pampas	350,886	5,549,641	15.8	323,027	4,812,208	14 5
Río Negro . . .	277,075	2,455,605		92.570	727.948	7.8
Neuquen . . .	143,698	1,106,601	7.2	90,062	364,801	4
Chaco	287,645	3,978,354	13.8	133,141	1,548,369	11.6
Misiones	103,195	120,870	5.9	102,494	396,939	3.7
Formosa . . .	51,268	826,818	16.1	100,000	227,450	21 2
Chubut. . . .	47,911	787,890	16.4	128,845	522,067	4
Santa Cruz .	336,281	3,822,071	5.4	205,376	1,129,926	11
Tierra del Fuego			1			
Los Andes . . .						
	5,520,357	142,902,443	25.8	4,749,362	170,342,317	35.8

These data completely correspond with those in Table I, formally and substantially. If the area mortgaged in 1916 was less than that mortgaged in 1915 by 779,995 hectares, while the area sold in 1916 exceeded that sold in 1915 by 450,990 hectares, the value of the area mortgaged in

1916 surpassed the value of that mortgaged in the previous year by 27,439,872 pesos, and the average value of these mortgaged lands, which was 25.8 pesos a hectare in 1915, had risen in 1916 to 35.8 pesos a hectare, that is at almost the same rate as the value per hectare of the lands sold which rose from 37.5 pesos in 1915 to 48.2 pesos in 1916.

The average value per hectare which the table shows for each province is proof that the rise in the value of land was regular and general for almost the whole territory of the country, and that in provinces in which a rise has taken place in the value per hectare of the land sold — among which provinces Buenos Ayres, Santa Fé, Cordoba and Mendoza are first — there is a corresponding proportionate rise in the value per hectare of the land sold.

The increase in the value of land in the province of Tucumán is, in spite of the fact that its precise causes escape us, particularly noteworthy. In this province the value per hectare of the land sold rose from 47 pesos in 1915 to 136 pesos in 1916, and similarly the value per hectare of the area mortgaged rose from 31.9 pesos in 1915 to 82.9 pesos in 1916.

§ 4. Classification of mortgaged lands by area.

In the two following tables mortgages are classified according to the area of the lands they burden :

Table V. — *Number of Mortgaged Rural Properties of Various Areas in Whole Territory of the Republic.*

Area of properties	1915		1916	
	Number of properties	Total area hectares	Number of properties	Total area hectares
From 1 to 25 hectares .	1,106	12,372	1,133	12,939
» 26 to 50 » .	533	20,266	573	20,725
» 51 to 100 » .	568	44,030	619	47,533
» 101 to 150 » .	305	37,946	273	46,152
» 151 to 200 » .	302	53,292	296	52,972
» 201 to 250 » .	166	37,487	187	42,196
» 251 to 300 » .	147	40,704	144	30,880
» 301 to 400 » .	165	64,099	214	75,877
» 401 to 500 » .	145	65,216	143	65,771
» 501 to 1000 » .	365	261,443	418	295,901
More than 1000	709	4,892,435	777	4,048,416
Total . . .	4,531	5,529,357	4,877	4,794,362

TABLE VI. – *Mortgages on Rural Properties, Classified by area, in each province in* 1916.

Provinces and territories	From 1 to 25 hectares		From 26 to 50 hectares		From 51 to 300 hectares		301 hectares and more		Total	
	No of properties	Area hectares	No of properties	Area hectares	No. of properties	Area hectares	No of properties	Area hectares	No of properties	Area hectares
Buenos Ayres	429	5,598	253	9,524	732	102,693	666	1,152,364	2,080	1,270,185
Santa Fe	64	1,164	105	3,580	232	30,129	149	269,117	540	304,010
Córdoba	177	1,735	74	2,809	344	53,341	370	657,444	965	715,329
Entre Ríos	28	392	52	2,078	130	16,191	57	71,662	267	90,323
Corrientes	—	—	—	—	—	—	4	8,441	4	8,441
Tucuman	69	601	10	308	18	1,743	19	47,662	116	50,314
Mendoza	251	2,236	55	2,120	63	8,349	27	323,381	396	331,086
San Juan	47	461	15	537	17	2,217	2	832,195	81	162,134
San Luis	21	146	1	44	15	2,644	45	190,871	82	193,205
Santiago del Estero	12	190	3	106	12	1,806	34	209,340	61	208,857
La Rioja	6	39	—	—	—	—	2	850,716	8	5,755
Salta	—	—	—	—	1	266	9	162,309	10	162,575
Jujuy	1	7	—	—	1	55	1	597	3	659
Catamarca	6	61	—	—	1	195	4	66,618	11	66,874
Central Pampas	17	207	8	330	40	7,055	76	315,431	141	323,027
Río Negro	4	61	5	206	7	888	20	91,415	36	92,570
Neuquén	—	—	—	—	2	446	8	99,616	10	90,062
Chaco	—	—	1	36	3	659	14	132,446	18	133,141
Misiones	1	—	—	—	—	—	2	102,491	2	102,494
Chubut	—	—	—	—	1	100	6	100,000	7	100,000
Formosa	—	21	1	47	—	—	15	128,777	17	128,845
Santa Cruz	—	—	—	—	—	—	22	305,376	22	105,376
Tierra del Fuego	—	—	—	—	—	—	—	—	—	—
Total	1,333	12,939	573	21,725	1 619	228,733	1,552	4,485,965	4,877	4,749,362
1915	1,106	12,372	533	20,266	1,488	213,459	1,404	5,283,188	4,531	5,529,357

The figures in these last tables make still more clear the tendency to a subdivision of land. We have not complete data for the classification of mortgages by areas in 1917. But from the source on which we have largely drawn we discover that the mortgages registered in 1917 numbered 5,338; and that 1288 of them were on holdings between 1 and 25 hectares in area, 648 on holdings between 25 and 50 hectares in area, 1709 on holdings between 51 and 300 hectares in area, and 1693 on holdings of an area exceeding 300 hectares.

In the following table we resume the movement of sales and mortgages of rural real estate, from the point of view both of area and of value, for the three years we are examining.

TABLE VII. — *Résumé of the Movement of Sales and Mortgages of Rural Real Estate, 1915-17.*

Year	Area sold hectares	Area mortgaged hectares	Percentage	Value of lands sold pesos	Value of lands mortgaged pesos	Percentage
1915	5,880,654	5,529,357	94 2	217,911,627	142,902,445	65.5
1916	6,340,644	4,749,362	74 9	305,877,186	170,342,317	55 6
1917	5,656,504	5,629,462	99	363,100,652	170,981,614	65 5

The percentage of the area sold represented by the area mortgaged — which was 94.2 in 1915, fell to 74.9 in 1916 and in the next year rose to 99 — corresponds to the total upward-tending movement to which we have referred, and is parallelled by the percentage which the value of the mortgaged lands formed of the lands sold, this latter percentage being 65.5 in 1915, falling to 55.6 in 1916, and rising once more to 65.5 in 1917.

As appears from the figures we have reproduced, the trading in land is chiefly, if not almost exclusively, supported by mortgage credit; and this fact proves once more than it is agriculture and its connected and dependent industries which attract in the Argentine the larger part of the available capital.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES

CANADA.

ADVANCES BY MORTGAGEES FOR THE PURCHASE OF SEED GRAIN IN SASKATCHEWAN. — *The Public Service Monthly*, Vol. VII, No. 8. Published by the Department of Agriculture of Saskatchewan, Regina, March 1919.

The Seed Grain Advances Act, 1919, lately passed by the Saskatchewan legislature, seeks to remedy the effects of a severe drought in certain parts of Saskatchewan during the summer of 1918, which combined with other factors to cause crops to fail totally or partially, so that many settlers had not enough seed grain for the 1919 season. For the continued prosperity of the province it was necessary that every available acre of land should be cultivated and sown. In this emergency certain companies which had

been lending money upon mortgages to farmers in Saskatchewan represented that they were willing to advance to these mortgagers the sums they needed for the purchase of seed grain, so long as the property of the borrowers, their financial position and their personal qualities provided a sufficient security. It was to regulate loans of this description that the Act in question was passed.

Its chief provisions are contained in sections 3 to 6 which are as follows :

" 3. Any mortgagee of land in Saskatchewan, whether under a mortgage heretofore or hereafter made, may make advances of money to the owner of the mortgaged land or any part thereof to enable him to purchase seed grain for use in sowing such land for the crop of 1919.

" 4. Where the mortgagee makes such an advance, he may add the amount thereof to the amount secured by the mortgage, and such sum shall, without registration in a land titles office, become, from the date of the advance, part of the moneys so secured and shall bear interest at the mortgage rate, shall be a charge upon the mortgaged land, and have the like priority in the same manner as the other moneys so secured, and shall be payable on the first day of November, 1919, or on such other day as may be specified in the application for the advance.

" 5. Not more than the sum of $ 250 in all shall be advanced under the provisions hereof in respect of any one quarter section of land (1), and, where the land is subject to more than one mortgage, no subsequent mortgagee shall be entitled to the benefit of this Act who makes an advance without the written consent of all prior mortgages.

" 6. — (1) In addition to the rights given by section 4 hereof, the mortgagee shall have a lien and charge for the amount of such advance and interest upon all the crops grown upon the mortgaged land in the year 1919, having priority over all other liens and charges except taxes and sums which may be collected in the same manner as taxes and the statutory lien, if any, created by the Municipalities Seed Grain Act, 1917, for seed grain furnished in the year 1918.

" (2) Where there exists under the provisions of the Municipalities Seed Grain Act, 1917, a lien on the crop grown during the year 1919, the mortgagee shall also have a first lien and charge upon the crop on the said land during the year 1920 having priority over all other liens and charges except taxes and sums which may be collected in the same manner as taxes.

" (3) For the purposes of this section the amount secured by the lien hereby created shall become due and payable on the first day of November, 1919, or on the first day on which the owner shall commence to cut the crop grown on such land, whichever shall be the earlier, and the mortgagee shall thereupon in addition to all other remedies have the right to seize and sell such crop in order to realize the amount secured by his seed grain lien. "

(1) A quarter section contains 160 acres.

FINLAND

THE SALE OF RURAL REAL ESTATE AND MORTGAGE CREDIT IN COUNTRY DISTRICTS. — *Suomen Tilastollinen Vuosikirja*, 1917 (Statistical Yearbook of Finland, 1917), Helsingfors, 1918

The statistics with regard to land in Finland are divided into the data relating to the towns and those relating to the country, and it is therefore easy to obtain an exact idea as to the true importance of the total sales of and mortgages on rural real estate. As regards the farmer, the transactions between 1891 and 1915 appear from the following figures.

Sales of Real Estate, 1891 to 1915.

Year	Whole country (francs)	Rural communes (francs)
1891	43,872,715	27,365,500
1895	49,801,921	33,266,603
1900	72,989,783	51,013,857
1905	95,532,734	72,593,922
1906	95,834,527	64,113,227
1907	147,542,332	84,583,517
1908	115,666,098	92,941,257
1909	147,247,268	92,312,167
1910	153,181,436	98,215,923
1911	167,065,220	107,236,229
1912	191,490,689	111,687,110
1913	172,894,721	123,168,952
1914	147,966,865	101,740,652
1915	171,307,609	124,324,779

As is seen, more than two thirds of the real estate sold in the whole country is situated in the rural communes. Sales in these communes have a character which is not found in the same degree in the case of sales of urban real estate. Sales after property has been seized or after a failure are less numerous ; and the crisis which the European war has caused has

been less acute in the case of transactions involving rural real estate than in the market for urban real estate. The fact appears in the following table :

Voluntary and Forced Sales from 1891 *to* 1915.

Year	Voluntary sales		Forced sales	
	Towns	Rural communes (francs)	Towns	Rural communes (francs)
1891	15,584,763	26,491,629	922,452	873,671
1895	14,081,585	31,787,552	2,453,730	1,479,051
1900	20,079,285	49,919,124	1,896,641	1,094,733
1905	20,189,607	71,213,151	2,449,145	1,380,471
1906	29,626,505	62,735,495	2,094,495	1,377,732
1907	61,343,351	83,916,913	1,615,261	666,604
1908	51,143,691	92,095,819	1,581,150	845,436
1909	51,958,424	90,162,752	2,976,697	2,149,415
1910	52,475,933	94,181,288	2,459 580	4,064,635
1911	74,600,815	104,418,769	5,228,176	1,817,460
1912	73,659,495	112,025,133	3,144,084	2,661,977
1913	44,742,865	121,404,003	4,982,904	1,764,949
1914	34,680,078	97,199,860	11,546,138	4,540,792
1915	29,057,126	121,166,004	17,925,704	3,158,775

While the total figure representing voluntary sales was always much lower in the case of towns than in that of rural communes, the figure showing forced sales in towns exceeded, except in 1910, that showing such in rural communes, and the war has merely accentuated this difference. In 1913, the last normal year, the figure showing forced sales in towns was equal to about 10 per cent. of the total figure for sales. In 1918 this average had become 24.9 per cent. and in 1915 it was 38.1 per cent. The corresponding average in rural communes was 1.4 per cent. in 1913, 4.4 per cent. in 1914 and 2.5 per cent. in 1915.

Far from arresting the movement of the sale of real estate the war gave it a new impulse. The movement of mortgages shows however two tendencies : a sudden rise in the number of mortgages in 1914 was followed in 1915 by a fall. But renewals, which were practically stationary in 1913 and 1914, rose in 1915 as never before. The following are the figures referring to the rural communes :

Movement of mortgages in rural communes from 1891 *to* 1915.

Year	New mortgages (francs)	Renewed mortgages (francs)	Mortgages cancelled (franc)
1891	18,587,596	6,764,285	6,185,992
1895	27,911,874	7,320,271	8,570,134
1900	34,832,228	7,103,290	6,081,559
1905	44,301,436	17,204,236	11,907,824
1906	53,738,285	13,150,361	10,731,957
1907	128,560,179	12,900,003	10,839,276
1908	115,156,819	15,788,728	13,015,925
1909	84,297,087	15,862,533	16,084,710
1910	57,591,200	17,041,499	13,328,797
1911	62,997,491	29,401,355	25,432,913
1912	62,249,960	25,720,005	22,128,655
1913	65,087,371	27,880,899	21,472,988
1914	119,416,902	26,589,021	20,248,717
1915	86,209,874	71,285,204	24,738,642

For the whole country the figure showing new mortgages in 1915 was 123,435,565 francs, that showing renewals 116,161,828 francs, and that showing cancellations 53,284,560 francs.

JAPAN

AGRICULTURAL CREDIT IN KOREA IN 1916-17. — *Annual Report on Reforms and Progress in Chosen (Korea)* (1916-17) - Seoul, July 1918.

The readers of this review (1) know that agricultural credit is distributed in Korea by three different groups of institutions : (*a*) the Agricultural and Industrial Banks (*Nôkô-Ginkô*) ; (*b*) the People's Bank Associations (*Chihô Kingû Kumiai*) , and (*c*) the Oriental Development Company (*Tôyô Takushoku Kabushiki Kaisha*).

As regards the Agricultural and Industrial Banks, a new branch was opened in 1916, bringing the total number of branch or detached offices up to 38 ; the authorized capital did not vary, remaining at 2,600,000 yen, while the paid-up capital remained at 1,469,890 yen ; the amount of the

(1) See our issue for November-December 1918, page 900.

debentures issued was reduced from 2,319,500 yen to 1,739,000 yen. The government granted no new advances. These banks have large resources in their deposits: the balance of deposits underwent an unprecedented increase, passing from 6,456,378 yen in 1915 to 8,017,121 yen in 1916. At the end of the year business could be resumed as follows:

Loans to be repaid by annual instalments	For agricultural purposes	1,755,321 *yen*
	For industrial . »	196,061
	For other . . . »	37,167
Loans to be repaid at fixed periods	For agricultural purposes	985,353
	For industrial . »	194,817
	For other . . . »	6,350
Other authorized advances		1,243,784
Ordinary loans		4,215,543
Bills discounted		3,791,852
Balance overdrawn in current deposits for commercial purposes		287,718
	Total . . .	12,713,960

Passing to the People's Banking Associations, we find that they numbered 250 at the end of 1916-17 as against 240 at the end of 1915-16, their membership having risen within the same interval of time from 65,742 to 94,668. Their growth is shown by the following table:

Development of People's Banking Associations, 1910 to 1916

	1910	1911	1912	1913	1914	1915	1916
Number of associations .	117	142	188	208	227	240	250
Number of members . .	43,747	52,371	67,497	80,193	60,322	65,742	94,668
Capital advanced by Government (*yen*)	1,170,000	1,520,000	1,880,000	2,080,000	2,265,000	2,395,000	2,495,000
Capital contributed by members (*yen*) .					694,300	786,808	1,064,680
Reserve fund (*yen*)	59,785	159,044	275,108	396,330	491,289	529,684	583,649
Balance of deposits (*yen*)			—	—	108,521	294,363	458,304
Balance of advances (*yen*)	762,816	1,182,932	1,716,697	2,158,195	2,147,278	2,127,646	2,818,829
Net profits (*yen*)	102,215	114,339	116,897	91,683	43,433	56,200	126,746
Amount of joint purchases (*yen*) . . .	12,982	47,307	49,920	99,731	96,967	17,747	12,011
Amount of consignment sales (*yen*) . . .	45,640	136,020	366,281	922,849	563,532	220,402	312,133

As to the Oriental Development Company, it continued to develop its resources. At the end of the fiscal year 1916 it owned 73,382 cho of land: namely 40,022 cho of paddy-field, 19,648 cho of upland, 2,272 cho of forests

and 2,438 cho of other lands. The rents received for these lands amounted to 1,688,000 yen. At the same date the company had introduced 3,070 families of immigrants, comprising 13,833 persons, into Korea, and had let to them 5,610 cho of lands, namely 5,412 cho of paddy field and 508 cho of upland.

As regards funds advanced for farming, the company had advanced the total sum of 6,700,000 yen on 31 March 1917, or 540,000 yen less than a year previously. The sum advanced in 1916-17 was 1,670,000 yen, or 390,000 yen more than in 1915-16, but there were premature repayments which caused the decrease we have noticed. Of the 6,700,000 yen lent, 2,660,000 yen were for agricultural enterprises, 2,450,000 yen for public undertakings, 1,100,000 yen for debentures issued by several Agricultural and Industrial Banks, and 490,000 yen for other purposes. The corresponding figures for the previous year were 3,270,000 year, 1,820,000 yen, 1,650,000 yen and 500,000 yen.

REGENCY OF TUNIS.

THE PROGRESS OF THE REGISTRATION OF LANDS. — *Statistique générale de Tunisie, année* 1917 (General Statistics of Tunisia, 1917). Tunis, 1918.

It is known that in 1885 a system of land tenure was introduced into Tunisia which was to render purchases easy and secure. The bey's decree of 1 July 1885, amended by the decrees of 15 and 16 March 1892 and 24 December 1898 adapted to local needs the celebrated Australian law known as the Torrens Act. By its means title is constituted by the entry of the property in question in a register, after certain formalities have been complied with, an enquiry has been made and certain intervals of time have elapsed ; no counter-claim to the property can afterwards be raised ; and it can be transferred from one person to another by a mere entry in this register. Mortgages and other rights in real estate can be similarly created, annulled or transferred. The following table shows what has been, from year to year, the number of applications for registration, the nationality of the applicants, their number, and the declared areas and values involved.

Of the 13,364 applications mentioned in this table, 10,429 were finally dealt with and led to the establishment of 10,722 titles to land. Since 10,655 new titles had been created by partial changes, the total on 31 December 1917 was 21,377 titles concerning 1,153,452 hectares worth 187,035,192 francs. The large number of the natives who applied for registration will not fail to be noticed. Nothing could better show how the law has become part of their customs.

Applications for registration (1886-1917).

Year	French applicants	Foreign applicants	Tunisian applicants	Total no. of applicants	Declared area (in hectares)	Declared value (in francs)
1886	18	3	2	23	13,432	1,373,280
1887	8	2	5	15	4,862	414,257
1888	19	7	7	33	24,735	1,090,417
1889	33	8	3	44	10,515	915,339
1890	33	8	4	45	38,107	1,710,997
1891	24	7	3	34	6,955	1,022,727
1892	156	51	86	293	88,515	7,676,605
1893	275	84	108	467	252,050	13,198.059
1894	208	159	134	501	38,799	10,333,640
1895	254	104	153	571	157,868	12,209,934
1896	230	180	211	621	43,674	10,089,497
1897	199	187	182	568	21,332	12,438,849
1898	224	206	236	666	28,810	9,674,701
1899	197	171	346	714	62,231	8,566,761
1900	150	217	346	713	31,284	7,870,503
1901	219	267	412	907	59,210	11,493,363
1902	246	208	273	725	62,133	9,633,881
1903	202	168	291	661	134,657	7,919,390
1904	186	154	360	700	78,851	9,223,800
1905	176	149	399	724	86,404	9,827,500
1906	137	327	144	608	62,341	7,986,500
1907	147	97	271	515	97,109	11,133,000
1908	140	85	296	521	63,962	8,313,000
1909	107	238	77	422	20,809	6,786,700
1910	107	83	200	390	22,655	5.174,200
1911	118	82	217	417	20,793	6,328,200
1912	110	116	224	450	28,388	3,301,103
1913	133	79	237	449	38,455	7,502,369
1914	105	69	169	343	40,600	9,217,926
1915	24	21	35	80	3,228	1,643,370
1916	19	21	46	83	2,043	1,501,274
1917	2)	13	23	56	5,041	1,004,425
TOTAL	4,224	3,656	5,484	13,364	1,650 454	221,575,567

Part IV: Agricultural Economy in General

UNITED STATES.

THE INFLUENCE ON THE FOOD SUPPLY OF THE LARGE MEAT PACKING FIRMS.

OFFICIAL SOURCE:

OFFICIAL U S BULLETIN, Vol 3, No 542. Washington, 19 February 1919

In September 1918 the United States Food Administrator made a confidential report to the President as to the influence exercised by five large packing firms in Chicago on the food supply of the American nation. This report has recently been published. Its main contents are as follows:

§ 1. THE ORIGIN OF THE INFLUENCE OF THE PACKERS.

The animals used for food in America were at one time slaughtered and distributed entirely locally. It was found, however, that the by-products of slaughtering could be turned to account more profitably if slaughtering were concentrated in the larger centres.

This concentration necessitated special railway-cars for the transport of live stock and large stockyards at railway termini. It was necessary that the cars should traverse railway lines independently of ownership; the need for them was seasonal and varied locally in different seasons. It could not be expected either that each railway would provide them, or that any particular railway would provide enough of them to meet the entire and shifting demand. The provision of the cars was largely stimulated by the meat packers who owned them to a large extent. The period for which meat could be preserved and the radius over which it could be distributed from the central slaughterhouses were increased by refrigerating it. The provision of the stockyards, the cars, the refrigerator cars, the icing stations and the cold storage all fell, to a large degree, to the wealthier packers, who thus found themselves in possession of a railway privilege which was to a great extent a monopoly and which they could use to build up their businesses.

From establishing a multiplicity of marketing facilities, such as cold storage warehouses, branch offices, the packers passed to having direct dealings with retailers of meat. The final result was that the wholesale traders were largely eliminated.

This position and their large banking alliances enabled the group not

only to dominate the interstate distribution of animal products but also successfully to invade many other departments of the preparation and distribution of food and other commodities. Their excellence of organization, the standing of their brands and their control of facilities, now threaten even more serious inroads on the spheres of manufacturers of and wholesale dealers in foodstuffs other than meat. They now sell scores of different articles, of which the list constantly increases, and are approaching a dominant position in the interstate market for foodstuffs of several different kinds.

§ 2. Whether the packers combine or compete.

The question of whether there is competition among the five great packing firms is much disputed. Apart from the question as to whether they conspire to eliminate competition, it seems to be clear that, operating as they do on parallel lines and having a wide knowledge of business conditions in every department, they must at least follow the same courses of action and must refrain from persistent and sharp competition among themselves. They certainly avoid such competition to a considerable extent. Their hold on the meat trade and on many other trades has become so great, owing to their vast equipment of slaughterhouses, cars and distributing branches, and to the banking alliances which each of them controls, that it is practically inconceivable that any new firm should rise to a level with them. In any event, competition between the five can only tend to reduce their number.

§ 3. Their marketing advantages.

The equipment, capital and organization of the great packing firms gives them marketing advantages which tend further to increase the area of their invasion into trades other than that in animal products. Furthermore, as they are the final recipients for all classes of animals, they can, when the few yards where they buy are supplied with more animals than they need, cause a fluctuation in prices by merely refusing to buy—not necessarily by any conspiracy. In other words, the narrow circle of buyers undoubtedly produces an unstable market which reacts to discourage production.

§ 4. The result to society at large.

It can be argued that the meat packing firms have developed great economic efficiency, that their profits are made from what was wasted forty years ago. Certainly they have been economically efficient during their period of competition and growth; but it is likely that this efficiency will diminish, and that, like all monopolists, they will begin to defend themselves rather by repressive measures than by the force of their own efficiency. The worst social result they have brought about is an injury wrought to the general spirit of initiative and the principle of equal opportunity.

§ 5. Reforms recommended.

The Federal Trade Commission made three main recommendations for the reform of the situation: (1) that the Railroad Administration take over all animal car and refrigerator car services; (2) that it take over the stockyards at termini; (3) that the federal government take over the packers' branch houses cold-storage warehouses, etc.

As regards the first of these recommendations, the Railroad Administration has to some extent taken over, as a war measure, private railway services for the transport of food. But the Food Administrator states that measures of this kind should be permanent. "There can be no doubt," he says, "that the car services, in order to obtain the results desired and the greatest national economy, must be greatly expanded and must be operated from a national point of view, rather than from that of each individual railway. Moreover, they are highly technical services beyond the ordinary range of railway management and need to embrace all cooled cars as well as meat cars. Whether this service on a national scale should be conducted by the government or by private enterprise, under control as a public utility, seems to me to require further thought, and, in any event, to depend upon the ultimate disposal of the railway question."

As regards the stockyards, the Food Administrator recommends that they be entirely dissociated from the control of the packers. Complaints largely concern the fact that the large packing firms prevent competitors from setting up packing plants within the yards or from connecting themselves with the yards by railway tracks or otherwise. For the cure of this evil the Administrator recommends that if the government acquire the railways it acquire the stockyards with them, whereas if it return the railways to their owners the required regulations be made under the Interstate Commerce Commission. Government ownership or control of the yards would also correct wrong practices between buyers and sellers, against which the war regulations of the Department of Agriculture are now a saleguard.

The Food Administrator does not, on the whole, support the suggestion that the federal government should take over the packers' branch houses, cold storage, warehouses, and other storing equipment. "I do not assume," he says, "that the Trade Commission contemplates the government entering upon the purchase and sale of meat and groceries at these establishments. Nor does it appear to me that the individual, separate and scattered branch houses of the packers furnish any proper physical basis for free, terminal, wholesale markets. In discussion with the independent packers I find no belief that the packers' branch houses would serve as a basis of universal market service, and I find much difference of opinion as to public markets as a solution. Any of the great packers' equipment in this particular would in any event require a great deal of extension to effect such objectives, and we are in no position to find the material and labour during the war."

The Administrator does not consider it necessary to provide the food trades with an absolute assurance that there will be at railway termini

equal opportunities for all dealers in any food product or manufacturers thereof to handle or store their goods pending final distribution. The most general feeling is that the trade would itself solve the problem if sites near railways were made available and if the other evils were eliminated. In any case, the whole question of public markets is peculiar to each town.

The Food Administrator points out that an effect of the great centralization of this industry overlooked by the Federal Trade Commission is the decline of slaughtering near many large towns. This seems to have arisen in a difficulty, now eliminated, in finding markets for by-products, and to have been encouraged by the fact that cheaper animals used to come from the cheaper lands of the West, as is now less the case because settlement of the country has largely equalized the costs of animal production. Another cause has been a fear of underselling by the great packers. If proper slaughterhouses could, possibly with municipal help, be increased near large towns, and if their business could be protected from illegitimate competition, the local production of meat might be much stimulated. The market, which now depends on a small group of buyers, would acquire a wider basis and prices would become more stable.

The Administrator considers that the proposals of the Trade Commission will not entirely solve the problem of the packers' invasion of the trade in other foodstuffs than animal products. Here they depend rather on their large credits and on their elimination of the wholesale grocers than on railway privileges. The question as to whether they cause such goods to be sold more cheaply than when the wholesale dealer intervenes is disputed. The Administrator inclines to the view that the business of the packers should be more limited, possibly confined to the slaughter of animals and the preparation and marketing of products obtained thereby. The problem of the branch houses might thus be solved. The legislative control involved is not unprecedented, but is paralleled in the banks, railways and insurance companies.

A further impediment to the free marketing of food in the United States is the insufficient standardization of food products. Standardization would help to strengthen the independent manufacturer.

To sum up: the Food Administrator is of opinion that "the ultimate solution of this problem is to be obtained by assuring equal opportunity in transportation, equal opportunity in the location of manufacturing sites and of terminal sites, and the limitation of the activities of these businesses. In this situation.... I believe that the fifty minor meat-packing establishments and the hundreds of other food preservers could successfully expand their interstate activities, and that local slaughter would increase with economic gain to the community and all, through continued competition, constantly improve our manufacturing and distributing processes to the advantage of both producer and consumer."

GREAT BRITAIN AND IRELAND.

THE WORK OF THE CONGESTED DISTRICTS BOARD FOR IRELAND FROM 1914-15 TO 1917-18.

SOURCES (OFFICIAL):

REPORTS OF THE CONGESTED DISTRICTS BOARD FOR IRELAND for the periods 1st April 1914, to 31st March, 1915; 1st April, 1915, to 31st March 1916; 1st April, 1916, to 31st March, 1917, and 1st April 1917 to 31st March, 1918. Dublin, 1915, 1916, 1917, 1918.

REPORTS OF THE IRISH LAND COMMISSIONERS for the same periods. Dublin, 1915, 1917, 1918, 1918.

REPORTS OF THE ESTATES COMMISSIONERS for the same periods. Dublin, 1915, 1917, 1917, 1918.

The circumstances which led to the establishment of the Congested Districts Board for the improvement of the economic condition of those districts of the West of Ireland where, though the population was not, strictly speaking, crowded, the inhabitants were unable to draw a sufficient livelihood from their holdings, were fully described in an article by Mr. F. S. Sheridan, which appeared in our issue of February 1915 (1). Mr. Sheridan also gave an account of the work of the Board up to 31 March 1914. It is the purpose of the present article to give an account of the work which has been done by the Board between that date and 31 March 1918.

The most important operations carried out by the Board consist in purchasing estates, in re-arranging and improving them and in re-selling the holdings to the tenants. Amongst other lands, they purchase untenanted land for the purpose of creating new holdings or enlarging old ones. Besides their dealings in land, the Board undertake a variety of schemes for the improvement of agriculture, the development of sea-fisheries, the promotion of industries and the general betterment of the congested districts.

§ 1. THE PURCHASE OF ESTATES.

In a recent article dealing with all forms of land purchase credit in Ireland (2), we gave statistics up to 31 March 1917 of the estates purchased and re-sold by the Congested Districts Board and we refer the reader to

(1) "The Congested Districts of Ireland and the Work of the Congested Districts Board", by Francis S. Sheridan, in the *Bulletin of Economic and Social Intelligence*, February 1915.

(2) "Land Purchase Credit in Ireland from 1912-13 to 1916-17", in the *International Review of Agricultural Economics*, May 1919.

that article for an explanation of the various methods by which these transactions are carried out.

The statistics in the previous article were compiled mainly from the reports of the Land Commissioners and the Estates Commissioners. In the present article we shall give similar statistics for the year 1917-18, together with total figures up to 31 March 1918. We shall also give other statistics taken from the reports of the Congested Districts Board.

Up to the end of 1914 it had been the policy of the Congested Districts Board to proceed rapidly with the purchase of estates needing treatment preparatory to re-sale. On the outbreak of the war, however, the Treasury required that the Board should not negotiate for the purchase of any more estates, with the exception of pending cases in regard to which the Board were already committed.

In Table I are shown the advances made by the Estates Commissioners to the Congested Districts Board for the purchase of estates in the year 1917-18. No such advances were made in that year by the Land Commissioners.

TABLE I. — *Estates Purchased by the Congested Districts Board in* 1917-18 *by means of advances from the Estates Commissioners.*

	Estimated Number of Purchasers on Re-sale	Number of Estates	Area in Acres	Purchase Price	Amount of Advances
				£	£
Purchased by advances from the Estates Commissioners under the Irish Land Act of 1903. .	52	2	1,070	2,844	2,844
Purchased by Advances from the Estates Commissioners under the Irish Land Act of 1909 .	2,452	35	111,477	230,975	230,155
Accepted "final offers" under section 60 of the Act of 1909, or compulsory purchases under Part IV of the Act of 1906 (Advances by Estates Commissioners).	2,174	17	72,951	375,499	375,499
Total . .	4,578	54	185,198	609,318	609,498

Table II contains the total figures relating to the estates purchased by the Congested Districts Board up to 31 March 1918 by means of advances from the Land Commission or the Estates Commissioners.

TABLE II. — *Estates Purchased by the Congested Districts Board up to 31 March 1918 by means of advances from the Land Commissioners or the Estates Commissioners.*

	Estimated Number of Purchasers on Re-sale	Number of Estates	Area in acres	Purchase Price	Amount of Advances
				£	£
By advances from the Land Commissioners under the Land Law (Ireland) Act, 1896 . . .	6,300	58	106,000	502,797	502,797
By advances from the Land Commissioners under Section 2 of the Congested Districts Board (Ireland) Act, 1890, and Section 77 of the Irish Land Act, 1903	1,514	33	51,519	274,926	274,926
By advances from the Land Commissioners under Section 2 of the Congested Districts Board (Ireland) Act, 1899, and Section 77 of the Irish Land Act, 1903, in accordance with the financial provisions of the Irish Land Act, 1909.	655	19	18,039	90,891	90,891
By advances from the Estates Commissioners under the Act of 1903	13,871	247	468,479	2,630,770	2,628,349
By advances from the Estates Commissioners under the Act of 1909	12,708	279	478,367	1,851,945	1,850,852
By advances from the Estates Commissioners in the case of accepted "final offers" under Section 60 of the Act of 1909 or compulsory purchases under Part IV of the Act of 1909 . .	9,754	102	351,133	1,602,693	1,602,693
Total . .	44,802	698	1,536,537	6,954,022	6,950,508

The foregoing Table, which is compiled from the reports of the Land Commissionners and of the Estates Commissioners, refers to completed purchases. We now give some figures (Table III), taken from the report for 1917-18 of the Congested Districts Board, showing the total estates purchased *or agreed to be purchased*, up to 31 March 1918, and including purchases made out of the Board's own funds.

TABLE III. — *Estates Purchased or Agreed to be Purchased up to 31 March 1918.*

	Number of Estates	Board's Own Funds				Approximate Area		
		and Commission Advance Purchase Price of Estates	Purchase Price of Estates	Tolls and Customs, Sporting Rights, Arrears of Rent and Intervening Interests	Total	Tenanted Land	Untenanted Land	Total
			£	£	£	Acres	Acres	Acres
Purchased under all Acts from 1891 to 31 March 1910	204	2,153,316	83,920	23,843	107,763	397,549	100,003	497,552
From 31 March 1910 up to 31 March 1918								
Purchased	720	4,787,290	57,730	18,544	76,274	1,398,980	363,518	1,762,498
Agreed to be purchased		1,790,007	26,470	11,054	37,524			
Total purchased or agreed to be purchased up to 31 March 1918	924	8,730,613	168,120	53,441	221,561	1,796,529	463,521	2,360,050

In addition to these estates, the Board's offers under the Act of 1909 for 9 estates were still pending; the Board had made offers for 96 estates but had withdrawn them; their offers for 78 estates had been refused; they had decided not to purchase 55 estates; and 73 estates either had not been valued or offers had not been issued for them. The gross total of the estates offered for sale to the Board up to 31 March 1918 was 1,235 estates, with an approximate area of 2,700,155 acres and an estimated purchase price of £10,474,309.

§ 2. ESTATE IMPROVEMENT WORKS.

Prior to the outbreak of war the Board had arranged to spend a sum of £200,000 each year on estate improvement works. One half of this was to be recoverable on re-sale of the improved holdings to the tenants and the remainder was to be provided out of the Board's annual income. The Treasury had consented to allow the Board to borrow from the Board of Works two thirds of the estimated outlay on each estate, the loan to be repaid on the re-sale of the estates, or in seven years if the estate had not been re-sold at the end of that period.

For the year 1914-15 a loan from the Board of Works of £100,000 had been authorized by the Treasury but, when war broke out, this sum was reduced to £25,000. In consequence a large number of improvement works were suspended, and many workmen and gangers dismissed. In

April 1915, a loan of £100,000 was again authorized and the Board's Inspectors were notified to resume work on the scale originally contemplated, but in many cases they were unable to procure the necessary workmen, as those who had been in their employment before the operations were suspended had in the meantime found more remunerative work in England or in other parts of Ireland.

The difficulty of obtaining labour greatly impeded the progress of the re-sale of holdings to the tenants. It frequently happens that congestion is to be relieved on an estate mainly by the migration of some of the tenants to new holdings on untenanted lands, and the Board were unable to obtain sufficient workmen for the fencing, road-making and erection of buildings required on new holdings.

The expenditure on improvement works in the year 1914-15 amounted to £153,111 ; in 1915-16 to £107,844 ; in 1916-17 to £108,654 and in 1916-17 to £115,189. The total expenditure up to 31 March 1918 was £1,440,577.

Table IV shows for each year from 1914-15 to 1917-18 the principal items of the expenditure on improvements. The last item " Net unapportioned expenditure " relates to certain miscellaneous expenses which are not apportioned amongst the various estates until the works have been completed. The figure shows the expenditure during the year less the amount apportioned during the year. In 1916-17 the amount expended under this head was less than the amount apportioned, so that the figure shown is a negative quantity.

TABLE IV. — *Expenditure on the Improvement of Estates, in each year from 1914-15 to 1917-18.*

Nature of improvement	1914–15	1915–16	1916–17	1917–18
	£	£	£	£
Mearing fences	13,520	12,961	12,831	20,231
Making and fencing roads	29,819	19,216	25,350	26,892
Buildings erected by the Board	61,337	44,707	44,908	38,740
Buildings erected by the tenants	28,713	22,056	17,046	17,681
Drainage	13,525	6,614	13,455	9,403
Tools and plant planting and miscellaneous	1,672	405	361	420
Total expenditure apportioned among the various estates	148,789	105,961	113,956	113,429
Grants to migrants for erection of buildings (1)	77	230	140	52
Net unapportioned expenditure	4,245	1,651	—5,442	1,707
Total expenditure	153,111	107,844	108,654	115,189

(1) These grants are made under a scheme of the Department of Agriculture and Technical Instruction.

§ 3. Dealings with untenanted land.

The Congested Districts Board have been criticized for acquiring considerable quantities of untenanted land and retaining it a long time in their possession without disposing of it. In several of their reports — notably in the report for 1915-16 — the Board explain fully the principles which have guided them in their dealing with such land.

In view of the fact that the amount of untenanted land available in the congested districts for the relief of congestion is far less than is required to provide the existing occupiers of small holdings with economic holdings, the Board have lost no opportunities of acquiring suitable untenanted land when it could be procured at a price not considered excessive. If they did not do this, it would not be possible, in the great majority of cases, to acquire such lands at later periods when re-arranging the estates affected preparatory to re-sale.

The Board enter upon the untenanted lands which they acquire as soon as the purchase agreement is signed, but a considerable time usually elapses before the examination of title and other formalities can be completed, the purchase price paid and the land formally vested in the Board. Until the land is vested in the Board it cannot be re-sold to the tenants.

In regard to untenanted grass-land, the Board have always considered it advisable to go into occupation at the earliest date upon which the vendor is willing to hand it over, as they are thereby enabled, pending distribution of the land, to provide upon it grazing for the live stock of small landholders, frequently to their great benefit. In many such cases tenants are enabled to retain and gradually to increase their live stock in preparation for the new or englarged holdings which are to be provided for them.

The Board have, in certain cases, acquired considerable tracts of grazing land which are too far from congested areas to be utilized for the enlargement of small holdings and for various reasons are not well suited for the formation of new holdings. These are lands upon which it has been the custom for a number of small landholders, before disposing of their young stock that have been wintered upon their poor holdings, to send this stock to graze upon good grass in the summer months. The Board anticipate that they will eventually be able to divide these lands into suitable divisions for the accommodation of stock of specified localities.

On 31 March 1918 the Board had on hand 311,179 acres of untenanted land classified as follows:—

Arable	54,167
Turbary and cutaway bog	69,275
Mountain and rough grazing	167,942
Plantations	3,033
Water, waste, etc.	16,762

Of these lands 12,4,517 acres had not yet been formally vested in the Board.

§ 4. Re-sales of estates purchased.

We have seen that the re-sales of estates have been retarded by the difficulties of carrying out the necessary improvements preparatory to re-sale. Comparing Table V, which shows the re-sales in the year 1917-18, with Table I, it will be seen how far in that year the re-sales fell below the purchases of land, notwithstanding the fact that the purchases had notably diminished.

Table V does not include re-sales in which the purchaser pays cash and no advance is made to him. The same remark applies to Table VI, which contains figures for the total re-sales up to 31 March 1918. In the latter table the figures showing the holdings re-sold through the Land Commissioners under the Purchase of Land Act, 1891, and the Land Law (Ireland) Act, 1896, are defective in that they do not include re-sales under these Acts of estates purchased by the Board out of its own funds.

Table V. — *Re-sales in* 1917-18 *of Estates Purchased by the Congested Districts Board.*

	Number of Advances	Area in Acres	Rent (of tenanted land only)	Purchase Price	Amount of Advances	Number of Years' Purchase of Rent (Tenanted land only)
				£	£	
Holdings re-sold through the Land Commissioners under the Act of 190-	325	7,725	3,276	77,766	77,766	23 7
Holdings re-sold through the Land Commissioners under the Act of 190(	10	168	1	2,603	2,603	—
Holdings re-sold through the Estates Commissioners under the Act of 1903	19	522	200	5,019	5,019	25.0
Holdings re-sold through the Estates Commissioners under the Act of 1909	33	1,363	452	8,792	8,792	19.4
Demesnes re-sold through the Land Commissioners under the Act of 190-	1	191	—	1,210	1,210	—
Total . .	397	9,969	3,929	95,390	95,390	—

TABLE VI. — *Re-sales up to 31 March 1918 of Estates purchased by the Congested Districts Board.*

	Number of Advances	Area in acres	Rent (of Tenanted Land Only	Purchase Price	Amount of Advances	Number of Years' Purchase of Rent (Tenanted Land only)
Estates re-sold through the Land Commissioners under the Purchase of Land Act, 1891 and the Land Law (Ireland) Act 1896 (1)	2,673	62,685	12,832	196,316	196,316	15.0
Holdings re-sold through the Land Commissioners under the Act of 1903	9,499	262,856	63,693	1,398,352	1,392,262	(2)
Holdings re-sold through the Land Commissioners under the Act of 1909	191	165	1	2,603	2,603	—
Holdings re-sold through the Estates Commissioners under the Act of 1903	38	1,068	622	15,990	15,990	25.7
Holdings re-sold through the Estates Commissioners under the Act of 1909	33	1,363	452	8,792	8,792	19.4
Demesnes re-sold through the Land Commissioners under the Act of 1903	15	2,800		39,869	36,793	—
Demesnes re-sold through the Land Commissioners under the Act of 1906		3,405		35,721	35,212	
Total (1) . . .	12,287	334,315	77,600	1,697,643	1,687,968	

(1) Not including estates purchased by the Congested Districts Board out of its own funds and re-sold under the Acts of 1891 and 1896.

It will be seen that of the estates purchased a considerable number still remain in the hands of the Congested Districts Board. In many cases, however, the proceedings for re-sale are in an advanced state, the purchase agreements having been lodged with the Land Commissioners or Estates Commissioners and applications made for advances. Table VII shows the number and amount of the advances applied for in respect of re-sales by the Board under the Acts of 1903 and 1909, but not granted before 31 March 1918.

TABLE VII. — *Advances applied for in respect of Re-Sales under the Acts of* 1903 *and* 1909 *but not granted before* 31 *March* 1918.

	No. of Advances Applied for	Amount of Advances Applied for
		£
Applications to the Land Commissioners:		
Under the Act of 1903	1,875	394,920
Under the Act of 1909	20	1,914
Applications to Estates Commissioners:		
Under the Act of 1903	1,039	259,739
Under the Act of 1909	2,940	621,787
Partly under the Act of 1903 and partly under the Act of 1909	189	50,671
Total applications under the Acts of 1903 and 1909	6,063	1,329,031

TABLE VIII. — *Holdings for the re-sale of which sale agreements have been executed up to* 31 *March* 1918.

	Number of Holdings	Area	Price
		acres	£
Holdings sold prior to the passing of the Land Act of 1909	9,368	251,255	1,168,190
Holdings sold between the passing of the Land Act of 1909 and 31 March 1914	1,197	93,758	571,301
Holdings sold during the year ended 31 March 1915	183	6,506	50,705
Holdings sold during the year ended 31 March 1916	2,386	72,404	502,019
Holdings sold during the year ended 31 March 1917	1,361	115,417	795,976
Holdings sold during the year ended 31 March 1918	2,717	95,160	643,725
Total holdings sold up to 31 March 1918	21,532	634,500	3,737,246

Table VIII contains a statement, compiled from the reports of the Congested Districts Board, of the number, area and prices of holdings re-sold by the Board under all Acts up to 31 March 1918. The figures represent the number of sale agreements which have been executed, irrespectively of whether the advances to the purchasing tenant have yet been made by the Land Commissioners or the Estates Commissioners. Besides holdings

re-sold (or to be re-sold) by means of such advances, the statement includes holdings sold for cash to tenants; accommodation land sold for cash in connection with glebe residences; plots sold for labourers' cottages, etc., and lands transferred free for public purposes; also commonage sold to tenants in undivided shares in connection with their holdings.

In Table IX we give a statement showing the manner in which the holdings have been treated before being re-sold. The holdings in this table do not include holdings sold for cash, nor commonage sold to tenants in undivided shares.

TABLE IX. — *Treatment before re-sale of holdings re-sold up to* 31 *March* 1918.

Classes of holdings	Number of Holdings	Area	Other Particulars
		Acres	
Holdings sold without alteration of boundaries or additional land	7,632	188,802	Rent £[illegible],572
Holdings re-arranged but not increased in value	4,357	115,269	Rent: £27,522
Holdings re-arranged and increased in value	4,602	92,909	Rents at which re-arranged holdings were re-sold: £29,607 Annual value of increases: £10,858
Holdings enlarged by parcels of untenanted land, but otherwise unaltered	1,895	47,789	Rents at which enlarged holdings were re-sold: £16,166 Annual value of enlargements: £[illegible],223
Tenant-purchasers' holdings enlarged	618	(1) 5,541	Annual value of enlargements: £2,295
Holdings provided for migrants and heirs	1,930	50,774	Rent (including buildings) £31,[illegible]07
New holdings provided for evicted tenants	46	1,400	Rent (including buildings): £[illegible]59
Old holdings in which evicted tenants were re-instated	107	3,557	Rent (including buildings): £1,386
Total holdings . . .	21,187	506,044	Rent £164,188
Lands re-purchased by vendors .	25	7,155	Price: £64,040
Total holdings and lands re-purchased by vendors	21,212	513,199	

(1) Area of enlargement

From this last table some interesting (if not very precise) deductions may be made. Of the estates purchased and re-sold by the Congested Districts Board rather more than half were re-sold without being increased in value. The average size of these holdings is 25 ½ acres and the average rent £6 17*s* or 5*s*. 5*d*. per acre. Taking all the holdings re-sold the average area is 24 acres and the average rent £7 15*s*, or 6*s* 6*d*. per acre. These figures give a rough indication of the annual value of land in the congested districts and of the size of holding which is considered by the Congested Districts Board to be an economic holding, that is, to provide a livelihood for the occupier and his family

(*To be continued*).

ITALY.

THE "OPERA NAZIONALE PER I COMBATTENTI".

SOURCES

DECRETO LUOGOTENENZIALE 10 DICEMBRE 1917, N 1970, CHE AUTORIZZA L'ISTITUTO NAZIONALE DELLE ASSICURAZIONI AD EMETTERE SPECIALI POLIZZE A FAVORE DI MILITARI E GRADUATI DI TRUPPE COMBATTENTI (*Lieutenancy decree of* 10 *December* 1917, *No* 1970, *authorizing the National Institute of Insurance to issue special policies in favour of the commissioned and non commissioned ranks of the fighting forces*) *Gazzetta Ufficiale del Regno d'Italia*, Rome, No 296, 17 December 1917

DECRETO LUOGOTENENZIALE 7 MARZO 1918, N 374, CHE AUTORIZZA L'ISTITUTO NAZIONALE DELLE ASSICURAZIONI AD EMETTERE POLIZZE GRATUITE A FAVORE DEGLI UFFICIALI DI COMPLEMENTO, DI MILIZIA TERRITORIALE E DELLA RISERVA DEL R. ESERCITO, NONCHÈ A FAVORE DI QUELLI DI COMPLEMENTO E DELLA RISERVA DELLA R. MARINA (*Lieutenancy decree of 7 March* 1918, *No* 374, *authorizing the National Institute of Insurance to issue free policies in favour of the officers of the supplementary force, the territorial militia and the reserve of the Royal Army and also in favour of those of the supplementary force and the reserve of the Royal Navy*) *Gazzetta Ufficiale del Regno d'Italia*, Rome, No 79, 3 April 1918

DECRETO LUOGOTENENZIALE 16 GENNAIO 1919 N 55, CHE APPROVA IL REGOLAMENTO LEGISLATIVO PER L'ORDINAMENTO E LE FUNZIONI DELL'OPERA NAZIONALE PER I COMBATTENTI (*Lieutenancy decree of* 16 *January* 1919, *No* 55, *approving the by-laws for the organization and working of the "Opera Nazionale per i Combattenti"*) *Gazzetta Ufficiale del Regno d'Italia*, Rome, No 26, 31 January 1919

FINANCIAL STATEMENT MADE BY THE HON NITTI, MINISTER OF THE TREASURY, TO THE CHAMBER OF DEPUTIES AT THE SESSION OF 26 NOVEMBER 1918

The "Opera Nazionale per i Combattenti" (*National Assistance of Soldiers and Sailors*), which is due to the initiative of Signor Nitti, ex-Minister of the Treasury, has its origin in the provisions of the lieutenancy decrees of 10 December 1917 (No. 1970) and 7 March 1918 (No. 374) which grant free insurance policies to commissioned and non-commissioned ranks

To every soldier or sailor two policies are assigned: one insuring the payment of 500 liras, in case of his death while on active service or in consequence of wounds received on active service, to the person he names, and one insuring the sum of 1000 liras in the form of annuities for thirty years, the insured having the option of anticipating this sum three months after his demobilization, if he state that it is to be employed on the acquisition of implements of labour, machinery, live stock or agricultural labourers' dwellings or for productive ends generally. The *Opera Nazionale* was instituted for the discharge of this important duty, and its organization and working were, as we shall see, fixed by a by-law approved by a lieutenancy decree of 16 January 1919.

§ 1. The organization, aims and endowment of the " Opera Nazionale ".

The *Opera Nazionale* provides economic, financial, technical and moral assistance for soldiers and sailors who have survived the war, and promotes in particular that technical and economic fitness and that civil status which allow the nation's labour power to reach its maximum productivity.

It has the legal form of a corporation ; its management is autonomous and its offices are in Rome. Its endowment consists of a foundation capital of 300 million liras, of its annual net income, and of the legacies and donations of individuals and associations. The foundation capital is constituted by the subscriptions, the balance needed to make up the sum of 300 million liras being taken from the net profits accruing to the *Istituto nazionale delle assicurazioni* (National Institute of Insurance) in the course of its insurance on behalf of the State of the war risks of navigation. The *Opera Nazionale* also has at its disposal all such means as the Public Treasury shall accord to it for making anticipated payments of the insurance policies.

It is managed by a board of nine members appointed by royal decree on the proposal of the Minister of the Treasury after hearing the Council of Ministers. The president is elected from the members of the board by the same procedure. At least four of the members of the board must have been chosen from Italian citizens who are not employed in any public office and who have given proof, while engaged in the pursuit of agriculture or some branch of industrial or commercial activity, of a noteworthy technical or administrative capacity.

The auditing is done by a committee of three auditors nominated by the Minister of the Treasury. They hold office for three years and can be reappointed. The Minister of the Treasury exercises a supervision and has the right to make inspections and to cause the dissolution of the board of management when serious irregularities or violations of law or of the by-law occur.

It is well to note that the law entrusts the business of this new enter-

prise not to the ordinary agencies of public administration, but to an autonomous body which has its own legal personality and can live in and react to the impressions of the sphere in which it has to work. It is perhaps the most salient characteristic of the by-law that it makes strict rules for the activity of the *Opera Nazionale* only when there is question of regulating facts or relations having a legal character. Otherwise the *Opera Nazionale* finds in its rules not prohibitions or limitations which can embarass its action but a series of powers of which, inspired by the best interests of public economy and considerations of profit and economic convenience, it can variously avail itself to suit the conditions in which it is called upon to act.

The *Opera Nazionale* is active through the medium of three distinct organizations — (*a*) agricultural, (*b*) social, and (*c*) financial — of which we will show the chief features.

§ 2. The agricultural section.

The *Opera Nazionale* has its first and its widest duty in the field of rural economy. Here more than elsewhere the new institution can, in fulfilling its aims, associate the particular advantage of the ex-soldier with care for the large interests of society. Among these interests is that of the maximum intensification of agricultural production, to be secured by organizing, with the help of credit, technical assistance and association, the cultivation of underfarmed or ill-farmed land.

The agricultural organization of the *Opera Nazionale* has as its essential aim the building-up for itself of a landed estate, by acquiring rural properties and by causing lands belonging to the State, the communes, religious foundations, public bodies and the remaining ecclesiastical bodies to devolve on itself. The *Opera Nazionale* is especially empowered to utilize lands which are subject to the obligation to make improvements or appear adapted to important alterations in their systems of cultivation. In the case of these the *Opera Nazionale* can carry out all the works necessary. The previous owner has the right to buy back the improved land, paying the price he received together with the increased value the land has acquired; but anyone thus buying such land back must engage to employ it in accordance with a plan, based on agricultural and economic considerations, which the board of management has approved. The board can moreover expropriate rural holders, being entitled to exercise the right granted to the government by the legal provisions now in force against landowners who neglect their duties.

The *Opera Nazionale* gives financial and technical assistance to enable the enjoyment of *usi civici* and of property held collectively, the enfranchisement of properties burdened with *usi civici*, the devolution of properties so burdened and suitable for undergoing the transformation of their systems of cultivation, and the utilization of properties held by villages and by agricultural associations.

In order to realize the value of the aforesaid landed estate and of its landed property generally, the *Opera Nazionale* accepts concessions or contracts for the execution of public works, making use of ex-soldiers' labour by preference.

It undertakes the execution of the works either directly or by ceding them wholly or partly to co-operative labour societies, consortia, societies or enterprises which prove themselves to possess the necessary technical and financial means. It can also promote the constitution of such associations and enterprises and supply them with the capital and technical resources they need.

The lands which make up the endowment of the *Opera Nazionale* and which can be cultivated immediately are granted by this institution to soldiers who cultivate them directly or to co-operative societies of agriculturists formed mainly among soldiers. The lands are granted (*a*) in usufruct or on lease for purposes of improvement, the grant being renewable, (*b*) in usufruct for purposes of improvement with a right of acquisition. The constitution of small holdings, where conditions in respect of the land and of labour and local conditions allow of them, is also rendered possible.

A cultivator holding land in usufruct for purposes of improvement cannot at first transform himself into a landowner. Landownership is reached by passing through a period of probation in which the cultivator can acquire skill in farming his land, independently or as member of a society, and can give undoubted proof of his technical aptitude and his attachment to the land. The passage to landownership is thus secured to the most deserving and capable.

Lands on which works of agricultural improvement or a transformation of systems of cultivation should be carried out can be granted in usufruct to co-operative labour societies which have had experience in developing the value of landed property, a preference being always given to individual members of the fighting forces or to societies of which they form the preponderant part. The usufructory or farmer is obliged to carry out the agricultural improvements and transformations stipulated in the deed of concession, to look to the maintenance of the buildings and works entrusted to him, and to pay the annual rent agreed upon to the *Opera Nazionale*. Failure to fulfil any obligation arising out of the deed of concession will cause the concession itself to lapse. At the expiry of the term of the grant in usufruct or on lease the holding will revert as by right to the *Opera Nazionale* which will arrange for granting it anew.

The usufructory who has fulfilled the conditions stipulated has a right to be preferred when the new grant of his holding is made.

The usufructory enjoying a right to acquire his holding is bound to pay a yearly rent which includes the sum necessary to the amortization of the capital value of the land and is moreover subject to other conditions which are established in the deed of grant.

The transference of the property is made by a resolution of the board of management, on the basis of which conveyances and transformations of rights are carried out freely.

A right of pre-emption is invariably reserved to the *Opera Nazionale* in case of a property acquired by a usufructory being alienated on onerous terms or gratis. When the *Opera Nazionale* wishes to exercise this right it must repay to the usufructory, his heirs or assigns only the price it itself received for the land together with the value of any improvements made. Any dispute is settled by a committee of arbitrators instituted in every province, of which the president of the lawcourt or a magistrate delegated by him will form part, as well as a representative of the *Opera Nazionale* nominated by the board of management, and other members who will vary with the nature of the dispute to be settled.

The *Opera Nazionale* also promotes the rise of *farming colonies* and new centres of population, seeking to attract to them especially agriculturists who have been on active service; it favours the constitution of *agricultural associations and co-operative societies* of whom ex-soldiers and sailors form an important part; it directs and supervises the cultivation and improvement of land; it promotes associations and institutions which aim at collective enterprise among cultivators as regards purchases, sales, insurance, the conversion of agricultural produce, and the practice of small industries accessory to agriculture, and finally it affords credit, directly or by means of the agencies it delegates, to the usufructories to enable them to make agricultural improvements and transform systems of cultivation, granting them long-term loans, repayable by amortization, and it stimulates the granting to farmers of the fighting forces and co-operative societies, by the Institutions so authorized, of credit for general purposes of farming and for the acquisition of machinery, live stock, implements, etc.

It is apparent that the tendency of the provisions we have noted regarding the agricultural section is towards a co-ordination in favour of members of the fighting forces and co-operative labour societies of the elements indispensable to improved tillage, that is labour, technical skill and capital.

The agricultural action of the *Opera Nazionale* can be considered from the point of view of the specific interests of ex-soldiers and sailors or in relation to national economy as a whole. With regard to the latter also the new institution will be a fertile source of prosperity and progress. For when lands now uncultivated, marshy or malarial have been restored to cultivation, and when modern intensive cultivation has been substituted for the extensive cultivation of some districts, and all the other measures in the programme of the *Opera Nazionale*, regarding co-operation, credit for ordinary farming and improvements, technical education, the repopulation of countrysides, etc., have taken effect, Italian agriculture will undoubtedly be able, to a constantly widening extent, to meet the new and the increased needs of the country.

§ 3. The social and the financial sections.

The action of the Social Section of the *Opera Nazionale* has been directed to uniting and to co-ordinating the various provisions made where

social interests are concerned on the initiative of the industrial, commercial or labouring classes or of the State and local bodies. Advantage will be taken, in the interests of individuals and of the national economy as a whole, of all measures intended to improve the moral and material conditions of labour, and to stimulate the individual initiative in Italy and abroad of all institutions aiming at increasing and improving the capacity and the production of labour and of all provisions for increasing the mobility of labour, assisting its displacement, and introducing a co-ordinated system of placing it. The principal duties of the Social Section are in fact:

(*a*) to enable ex-members of the fighting forces to resume the pursuit of their old trades or callings;

(*b*) to improve their special labouring capacity, and to co-ordinate, in the interests of national economy, the employment of this capacity;

(*c*) to promote labour associations and joint associations of labour and capital with the object of undertaking work at home and abroad;

(*d*) to raise the moral and material conditions of the nation's labour supply.

With these objects the *Opera Nazionale* promotes the institution of offices for the supply of information as to the home and foreign labour markets, and completes the action of the offices of this kind which already exist. It pays unemployment allowances to ex-soldiers and sailors who have insurance policies, and assists their displacement, supplying the demands for labour which are most profitable to the national economy. It also promotes the institution, in connection with farms and businesses and employers' and labourers' organizations, of schools giving an industrial, commercial or agricultural training with a view to improving the skill as agriculturists or members of other trades of workmen or members of the middle class, and it supplements the activity of such schools of this kind as already exist. It provides allowances and grants for soldiers and sailors and, as far as possible, for their sons attending such schools, and endeavours to place them in work.

In co-operation with industrial, commercial and labour organizations it provides for the constitution of allowances for members of the fighting forces who go abroad to finish their technical training, to find new openings for trade, etc It lends moral and financial aid to those of them who wish to complete studies interrupted by the war, or to enter or return to the liberal professions or to small trading or artizans' businesses. It co-operates with due caution in endowing with a foundation, guarantee or working capital labour associations and joint associations of labour and capital of which members of the forces form an important part, if these associations aim at the execution of works in Italy or abroad or undertaking maritime business, in particular coast traffic and the fishing industry.

Finally by giving technical, legal and financial assistance the *Opera Nazionale* procures the application in the case of members of the forces of the rules comprised by social legislation in general and by all the special provisions intended to improve their condition.

The Financial Section proposes to undertake all the credit operations,

as regards both receipts and expenditure, for which the *Opera Nazionale* is authorized, and it administers the property of the institution. It undertakes directly the affording of land, agricultural and personal credit by means of special services and the agencies it authorizes. It can contract loans with bodies so authorized. It can issue bonds guaranteed by a mortgage on its real estate or by credits held with the State or public bodies. Such bonds are placed on a par with land paper and admitted, as by right, to Exchange quotations. Institutions having a moral purpose and other societies and institutions, who are legally obliged to invest all or part of their property in securities issued or secured by the State, are authorized to invest in the bonds of the *Opera Nazionale* as much as a quarter of the proportion of their property subject to such obligation. The *Istituto nazionale delle assicurazioni*, the *Cassa nazionale di previdenza*, the *Istituto nazionale di credito per la cooperazione*, the *Casse di risparmio*, the *Monti di pietà* and all credit and thrift institutions subject to government supervision are similarly authorized.

The bonds of the *Opera Nazionale* are included among the securities on which issuing institutions are authorized to make advances, and can be accepted as cautionary deposits by public administrations.

The Financial Section can also receive savings deposits from the organizations which adhere to the *Opera Nazionale* and can in general accomplish all business tending to the attainment of its aims.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES

DENMARK.

THE CONDITION OF AGRICULTURAL LABOURERS IN 1918. — *Danmarks statistik: Statistisk aarbog* 1918 (Statistics of Denmark: Statistical yearbook 1918). Copenhagen, 1918.

Since the beginning of the European war the annual wages of agricultural labourers have undergone an increase much greater than that of the ten preceding years, in the case both of workers lodged and fed by the employer who hires them and in that of those who find their own meals.

The annual wages of workers lodged on farms in 1905, 1910, 1915 and 1918 were as follows.

In the same years the wages of men day-labourers were as follows.

See tables page 423.

From these two tables it seems to follow that the pay of workers lodged on farms is a little lower than that of day-labourers. It should however be noted that the day-labourers' wages are estimated on the supposition, not always realized in practice, that they are permanently employed. The annual wages of the lodged workers are in reality higher than those of the day-labourers to an extent which cannot however be precisely estimated.

TABLE I. — *Annual Wages of Workers lodged on Farms.*

		Men			Women		
		Cash wages (crowns)	Food (crowns)	Total (crowns)	Cash wages (crowns)	Food (crowns)	Total (crowns)
Islands	1918	812	625	1,224	338	540	878
	1915	421	350	771	269	306	568
	1910	344	265	609	222	232	454
	1905	263	226	489	177	193	370
Jutland	1918	690	668	1,358	360	555	915
	1915	458	359	817	266	303	569
	1910	370	264	634	218	228	446
	1905	295	233	528	168	201	369
All Denmark	1918	657	650	1,307	350	548	898
	1915	441	354	795	264	305	569
	1910	364	263	627	220	229	449
	1905	279	230	509	173	197	370

TABLES II. — *Wages of Men Day-Labourers.*

		Spring and summer (crowns)	Autumn (crowns)	Winter (crowns)	Average annual wages (crowns)
Islands	1918 . .	4.37	5 35	3 45	1,250
	1915 . . .	2 65	3 17	2.10	770
	1910 . . .	2.08	2.64	1.72	630
	1905 . . .	1.75	2 15	1 40	545
Jutland	1918 . .	5.37	5 99	3.70	1,407
	1915 . . .	3.22	3.56	2.29	890
	1910 . . .	2.60	2 97	1.78	720
	1905 . . .	2.16	2.49	1.48	615
All Denmark	1918	4 58	5.07	3.57	1,390
	1915 . . .	2.94	3.36	2.19	830
	1910	2 34	2.80	1.75	670
	1905 . . .	1 95	2.42	1.44	580

As regards the increase in wages from 1915 to 1918, it is, on the average, higher than the contemporaneous increase in prices, as can be seen from the following figures. If 100 be taken to stand for the expenses of a household in July 1914, these expenses were 116 in July 1915 and 182 in July 1918, that is they increased by 56.9 per cent between 1915 and 1918. In the same period the increase in all Denmark of the wages of workers lodged on farms was 64.4 per cent. in the case of men and 57.8 per cent. in the case of women, while the wages of day-labourers increased by 67.4 per cent. There was therefore a real rise in wages.

We should add that in 1917 the trades-unions belonging to the Union of Trades-Unions included 8 gardeners' trades-unions, grouping 602 workmen as against 425 in 1916, and 110 agricultural day-labourers' trades-unions grouping 4,200 members as against 1,600 in 1916.

FINLAND

LAND SETTLEMENT ON 31 DECEMBER 1915 (1) — *Suomen Tilastollinen Vuosikirja*, 1917 (Statistical Yearbook of Finland, 1917) Helsingfors, 1918

The outbreak of the European war did not stop the work of land settlement. The General Loans Fund for the landless population continued to grow and its assets, which amounted to 11,444,373 francs in 1911,

Distribution of loans made from 1905 to 1915

Year	Loans to rural communes		Loans to co-operative land purchasing societies	Forest farms acquired by State	Loans appropriated to cultivation and building on small State farms	Loans to individuals	Total
	Investment in lending banks for landless population	Purchase of lands					
	(francs)	(francs)	(francs)	(francs)	(francs)	(francs)	(francs)
1905	1,269,974	—	—	—	—	6,719	1,276,693
1906	1,481,603	—	56,000	—	—	6,485	1,544,088
1907	3,047,169	120,000	270,250	—	—	6,068	3,443,487
1908	3,193,020	422,000	280,214	—	—	5,676	3,900,916
1909	4,651,672	422,000	446,799	—	—	5,224	5,525,695
1910	6,104,689	482,000	543,499	—	—	4,742	7,135,130
1911	6,845,558	486,352	686,472	—	—	4,254	8,022,636
1912	7,302,891	631,454	677,026	120,982	—	3,745	8,736,098
1913	8,270,511	770,696	672,495	223,208	—	3,217	9,940,127
1914	8,666,820	913,274	655,562	272,847	47,850	2,667	10,559,020
1915	8,690,247	1,006,220	628,378	261,649	58,700	2,095	10,647,289

(1) See on this subject our issues for February 1913, November 1916 and January 1917

amounted in 1912 to 12,455,631 francs, in 1913 to 13,484,087 francs, in 1914 to 14,320,474 francs and in 1915 to 15,011,082 francs. This increase of the funds allowed of new transactions, of which the importance is shown by the preceding table.

The number of the lending banks of rural communes, through the medium of which most operations are effected, as appears from the table above, was 270 in 1911, 280 in 1912, 309 in 1913, 320 in 1914 and 329 in 1915. It is interesting to notice the purpose of the loans granted, and the following table gives particulars on this point:

Object of loans granted from 1905 *to* 1915.

Object	No. in 1905	No. in 1910	No. in 1914	No. in 1915	Average amount of loan in 1913 (francs)
1. Purchase of properties taken to be independent in the official land survey	630	3,440	5,510	5,726	1,212
2. Purchase of very small properties (parcels)	640	2,139	2,641	2,743	831
3. Building dwelling-houses:					
(*a*) on land belonging to borrower	123	552	940	977	439
(*b*) on land belonging to Crown or communes	12	125	135	140	372
(*c*) on private property let to borrower	379	493	390	405	292
4. Bringing land under cultivation:					
(*a*) on borrower's land	25	66	102	105	482
(*b*) on land belonging to Crown or communes	11	207	330	343	281
(*c*) on private property let to borrower	542	418	320	333	270
5. Building of outhouses, stables drying-sheds:					
(*a*) on borrower's land	17	2	7	8	372
(*b*) on land belonging to Crown or communes	—	1	—	—	—
(*c*) on private property let to borrower	29	—	—	—	—
6. Repurchase of tenants' dues	57	24	12	12	605
7. Purchase of firewood	2	—	—	—	—
8. Consolidation of a transaction	1	4	—	—	—

The average amount of loans increased noticeably from year to year. Thus the amount of the loans for the purchase of properties taken to be independent in the official land survey passed from 825 francs in 1905 to 1212 francs in 1915; that of loans for the purchase of parcels from 584 francs in 1905 to 831 francs in 1915; that of those for the repurchase of tenants' dues from 361 francs in 1915 to 605 francs in 1915.

FRANCE

CONSTITUTION OF REGIONAL AND DEPARTMENTAL AGRICULTURAL OFFICES. — Law of 6 January 1919 for the intensification of agricultural production; decree of 25 April 1919 for the application of that law, and circular of the same date of the Ministry of Agriculture and Victualling to the prefects

By a law of the 6th of last January Parliament authorized the constitution of regional and departmental agricultural offices, having legal personality and being financially autonomous. This reform will mark a date in the history of French agriculture. It represents a distinct step on the road to decentralization, and that from three points of view:

(1) The initiative in the matter of realizing improvements in departments or regions will belong to the agricultural offices. The central administration will intervene only in order to trace certain lines of direction and to assure the co-ordination of the programmes drawn up.

(2) The execution of these programmes will also be the business of the agricultural offices. They will have at their disposal important resources with which to carry on the services they decide to institute. The mission of the State agents with regard to them will be confined to giving advice and supervision.

(3) Although the members of these offices are not directly elected by the agriculturists, they are, as the offices are constituted, a true product of the agricultural world. The members of regional offices will be delegates of the departmental offices, and the members of the latter will be chosen by the General Councils from farming agriculturists and office-holders of agricultural associations. The Inspectors General of Agriculture and the Directors of Agricultural Services will be the only representatives of the central power. It may therefore be asserted that by the institution of agricultural offices the destiny of agriculture is to a large extent entrusted to agriculturists themselves.

Departmental Agricultural Offices. — Practically, a departmental agricultural office is managed by a council composed of five members nominated for five years by the General Council and of the Director of Agricultural Services who has the casting vote. Ot the five members nominated by the General Council two at most are chosen as being members of that council, the others as being representatives of the principal agricultural groupings. Only agriculturists who have directly farmed a rural holding in the department for at least ten years, or office-holders of departmental or regional associations who have held office for at least five years, are eligible.

Before 1 November every year the departmental office draws up its programme of work in the ensuing year, taking the advice of the agricultural associations. This programme takes into account :

(1) Measures of every kind capable of increasing and improving agricultural production, notably :

A. — For vegetable production :

(*a*) The determination by experiment of the best varieties of vegetables ; propagation from selected seeds ;

(*b*) Popularization and determination by experiment of scientific manures, crop-rotations and systems of cultivation best suited to economic and cultural conditions, improved processes of working and cleansing soil, prevention of vegetable and animal parasites, improved implements ;

(*c*) Extension of land improvement.

B. — For animal production :

(*a*) Improvement of breeds ; general utilization of selected animals for purposes of reproduction ;

(*b*) Determination by experiment and popularization of scientific methods of feeding and the most productive methods of stock breeding ;

(*c*) Improvement of animal hygiene.

C. — For agricultural industries (wine, cider, butter, cheese and preserve making and other industries) :

(1) Determination by experiment and popularization of the best processes of converting, preserving and utilizing vegetable and animal products.

(2) Means of ensuring that these measures are applied and popularized, in particular by setting up experimental stations and developing economic and social institutions.

The departmental office has the initiative in proposing modifications of its programme to meet current needs and cases of urgency due to circumstances. The programme when thus modified cannot be executed without ministerial sanction.

Every year, after the farming season, the departmental office draws up a detailed report on work accomplished or in course and results obtained, and transmits it, through the regional office, to the Ministry of Agriculture.

Regional Agricultural Offices. — A regional office is established in each region of agricultural inspection determined by a ministerial decree. It is managed by a council which comprises, as well as the Inspector General of the region, two delegates of each departmental office in the district. This council examines the proposed items of the programme of action, and draws up its own programme of action and scheme for a budget, taking into account all improvements of interest to the whole region or a group of departments, in particular, the necessary scientific research, the experimental farms and the breeding centres which have to be organized. Before the 15th of December the council submits its proposals and opinions to the Minister of Agriculture.

The Council of General Inspection of Agriculture studies the various programmes of the regional offices and transmits them, tgether with its opin-

ions on them, to the Minister, who decides on them and awards the State subsidy. The council of the regional office draws up its final programme on the basis of the ministerial decision.

Relations of the Offices with the Representatives of the Ministry of Agriculture. — In each department the Director of Agricultural Services and technical adviser of the departmental offices sees to the execution within his department of the decisions of the regional and the departmental office. In the same way, in each region the Inspector General of Agriculture and technical adviser of the regional office sees to the execution of the decisions of the regional office and departmental offices and follows the work of the offices and of the national experimental centres. He can also be present at the meetings of the departmental offices in a consultative capacity.

The Council of General Inspection of Agriculture examines the programmes of the offices, noting especially :

(1) Improvements which can be immediately realized and require only to be popularized ;

(2) Improvements to be supervised and carried out in the experimental farms and breeding centres of the departmental and regional offices and in the national experimental centres ;

(3) Scientific research to be recommended to the Higher Board of the Agronomic Station and Agricultural Laboratories and eventually, the revision of the results of such research to be undertaken in the experimental farms and breeding centres of the offices and the national experimental centres ;

(4) Improvements, of a kind to be encouraged by the offices, to be recommended to the Department of Rural Engineering ;

(5) Economic, mutual and social institutions to be constituted or developed ;

(6) The programme of the Office of Agricultural Information for propaganda work.

GREECE.

THE PROGRESS OF AGRICULTURE. — ALEXANDRE C. MYLONAS: *Un aperçu des questions économiques grecques*, in the *Revue des Balkans*, Paris, February, 1919; A. ANDREADES : *Les progrès économiques de la Grèce*, in the *Journal des Économistes*, Paris, January and February 1919.

The chief national resources of Greece are due to her agriculture and her merchant navy, and 70 per cent. of her exports are products of her soil. Nevertheless, only 20 per cent. of her territory is easily cultivable. The country is all mountains and slopes and the water system is equally unfavourable to enterprise. There are no navigable rivers, and rivers which allow of floating are exceptional. The sloping land and the deforested mountains cause disasters every spring.

Old Greece, except Thessaly and some districts of continental Greece,

is a country of small holdings. This system of land tenure, which the State is now seeking to make the rule in the northern provinces, was for a long time, owing to the lack of capital, an additional obstacle to the progress of agriculture. For a long time the peasant could borrow only at 50 per cent.; he could not in these conditions increase his live stock, follow scientific methods, buy improved implements or means of transport, drain marshes, etc.

These difficulties ought not to have occurred in Thessaly where large holdings were almost the rule. Yet during the years which followed the reunion of Thessaly to the mother country, the large landowners made no very marked efforts to prove the advantages of farming on a large scale. They were Turks who remained faithful to old usages, or capitalists living abroad and satisfied with the income which, without effort, they derived from land bought at a low price. The great commission of enquiry on the Thessalian question found in 1895 only two landowners who had made serious attempts at scientific cultivation.

In the last fifteen years a great improvement has been realized. In the first place all the drawbacks to small holdings are lessening daily. What the Greek farmer lacked was capital and knowledge. He gradually acquired both. The increase of the public treasure and the consignments of money received from emigrants to America have caused the rate of interest often to be lower in the country than in towns. In the Peloponnesus it does not rise above 5 per cent. and the cultivator rarely has recourse to borrowing. The development of public education, the improvement of communications, and experience, in many cases, of a stay in a foreign country, have opened the peasants' eyes. They are ready to admit new ideas. The readiness with which they adopt the use of improved implements or chemical manures is enough to prove this fact. But a more striking proof is found in the success of the law of 1915 as to co-operative societies. Before this law was passed the whole co-opreative movement, if stock farming be left on one side, was represented by five agriculturel syndicates of which the oldest dated from 1901. Since this law, which facilitates and regulates relations between members of societies, has been passed, 730 agricultural co-operative societies have been founded. More than half of them are credit societies to which the National Bank, in virtue of its new charter (1915) advances up to 25,000,000 francs. But there are also a good number of viticulturists' societies, especially those formed by producers of currants and raisins. We should add that the progress realized by the large landowners is no less noteworthy.

Malaria ravaged the country, of which the most fertile districts — Boetia, Elis, the Spartan plain — were not habitable in the proper sense of the word. In order to transform the country efforts are made at reforestation and especially at the prevention and limitation of fires. The extension of cultivation has been yet more effective. Currants have caused the whole north-west part of the Pelopponesus to be made healthy. Other crops have played an analagous part in the remainder of the kingdom. We should notice the draining of marshes, especially of Lake Copaïs in North Boetia. Of the

2,400 hectares it covered, 1,650 are let by the Copais Company to the peasants of neighbouring villages; some thousands of ares are directly farmed by the company; 250 hectares belong to the cultivators in full ownership. Great extents of land, to which fallow lands should be added, are used for stockfarming. The remainder is taken up by the works — for canals, roads etc. — which the company has been obliged to execute, and by the very numerous buildings and gardens it uses for its staff and its products. The number of families of *métayers* cultivating the 1,659 hectares which are let is 2,700. This shows what a service these lands restored to cultivation have rendered to the Boetian population.

Land settlement has also been undertaken and more than 400 agricultural colonies have been formed. Finally a law of December 1917 provides for the division of all properties of an area of more than 10 hectares. They may be bought by the peasants to whom the National Bank will make loans, guaranteed by the State, of as much as four fifths of the price, or they may be bought by the State.

JAPAN

AFFORESTATION IN KOREA. — *Annual Report on Reforms and Progress in Chosen (Korea,* (1916-17'. Keijô (Seoul), July, 1918.

Afforestation has been actively encouraged in Korea by the Japanese Government. The Government afforestation of denuded hills and mountains in the vicinity of Seoul started in 1907. The total area planted up to the end of March 1917 was over 2,300 *cho* and the trees planted thereon numbered 10,573,000.

Provincial Governments taking charge of State mountains have also been conducting afforestation since 1911, the cost being met by the "local expenses funds." By the end of March 1917, a total area of 1,109 *cho* had been planted with 4,895,000 seedlings.

With a view to arousing in the people an interest in afforestation, the Government appointed April 3 (the Anniversary of the demise of Jimmu Tennô, the first Emperor of Japan) to be observed throughout the Peninsula as Arbor Day. This arouses much interest in the people in general, especially in the school-children. On the sixth Arbor Day (1916), the total number of participants throughout the country reached 750,000 and the trees planted on that day numbered over 20,470,900 making the aggregate for all Arbor Days 76,600,000.

Private undertakings in afforestation are greatly increasing in number. Several large corporations are also conducting afforestation on a considerable scale. The total area devoted to afforestation by individuals and corporations since 1910 (including the model afforestation of villages and the memorial afforestation on the Coronation Day) now amounts to 82,000 *cho*, the aggregate number of trees planted being 260,000 000.

SWEDEN.

AGRICULTURAL WAGES IN 1917 (*Sveriges officiella statistik: Arbetstillgång, arbetstid och arbetslön inom Sveriges jordbruk år* 1917 (Official Statistics of Sweden: Proportion of Labour-Supply to Needs, Duration of Work and Wages in Swedish Agriculture in 1917) Stockholm, 1919.

The official enquiry into the proportions of the labour supply and into duration of work and wages in Swedish agriculture in 1917 was based on fairly detailed question-forms which were filled up by the presidents of communal assemblies in 2,208 rural communes, that is in 64.9 per cent. of the communes covered by the enquiry.

Proportions of the Agricultural Labour Supply. — The question-form used for the enquiry placed first a question as to the proportions of the labour supply in each rural commune. The answer was to be a general estimate, showing whether the agricultural labourers domiciled in the place or coming to it regularly could be considered to form a supply of labour sufficient for the coming farming operatios, taken together. The answer was to be expressed in one of the following words — good, sufficient, insufficient. The material collected shows that in 87 of the communes which answered, that is in 4 per cent. of them, the labour supply was good; in 1 133 or 51.3 per cent. it was sufficient and in 954 or 43.2 per cent. it was insufficient. Certain answers were not received from 34 communes or 1.5 per cent. These figures show, as compared with those for the previous year, a certain improvement as regards the proportions of the labour supply, to be largely attributed to the fact that the needs of industry for labour have lessened in consequence of the relaxation which had begun to affect the wartime activity. But the improvement must also be due to the fact that the 1917 harvest demanded less work than usual because it was comparatively small and because fine weather facilitated the getting in of the crops. Throughout large parts of the country, however, the competition for labour involved by the timber-felling on a large scale, undertaken by the Fuel Commission, counteracted the improvement. Consequently the supply of agricultural labour was much increased in the southern parts of Sweden which are poor in forests, especially in Scania, but was somewhat exiguous in the forest districts of Central and North Sweden.

The proportions of the labour-supply differed much in the different districts. But the figures showing the number of communes in the various departments in which the supply of labour was insufficient do not allow of certain conclusion as to the greater or less number of labourers in each department in relation to the cultivated area. What is above all reflected in these figures is the greater or less progress of agricultural organization in the various places, and in particular the more or less aptitude of employers to reduce labour by using machinery and means of transport, and to get out of their difficulties by, in general, farming economically with what material they have available.

Duration of Work. — The information we give as to duration and distribution of labour concerns only the working day in agriculture or tillage properly so called, that is in fieldwork, work in barns and on threshing-floors, etc., and does not apply to persons working with stock, who usually have a considerably longer working day mostly given up to work in stables and byres.

Moreover, in the case of agricultural labourers properly so called, the figures in the report apply only to summer work. The word summer denotes the full farming season, that is the three summer months in which work in general begins earliest and ends latest. As the days shorten, the daily working hours lessen in agriculture, so that in winter the working day is several hours shorter than in summer.

On an average for the whole country, the gross working time per day in summer, that is to say working time including rests, is 12 hours 18 minutes; rests last 2 hours 12 minutes, and work without rests therefore lasts 10 hours 6 minutes, which is thus the net working day.

During the six years in which enquiries as to agricultural labourers have been made, no change has been ascertained in these conditions which depend on the whole organization of labour in agriculture and are consequently nearly constant.

Duration and distribution of labour differ considerably in different parts of the country. If the net working day be principally considered, it is found that there are in Sweden two districts in which such day is shorter than or equal to the average ascertained for the whole country. The first of them comprises the departments of Scania and Blekinge, the second a large region in the Swedish midlands stretching from the departments of Värmland, Kapparberg and Gävleborg, inclusively, on the north, to the department of Ojebrö and Östergötland, inclusively, on the south. The other parts of the country are distringuished by a comparatively long working day.

Wages. — Since the enquiry undertaken was not intended to do more than to give a general view of the course of agricultural work in the whole country, only conditions common to all Swedish agriculture were taken into account, differences on this point in the various districts being left on one side. Therefore figures showing wages have been noted only in the case of a small number of the larger groups of workmen who are found throughout the territory of the country or at least in the greater part thereof. As moreover the enquiry is based only on general averages and not on individual data, it has been thought well to state exact rates of wages only in the case of the least skilled and least well paid labourers in the groups, that is in the case of those whose wages are fixed by local usage, and not in that of specialized workers or foremen whose pay is relative to their personal capacity.

The usual prices of labour in the categories of workmen thus limited vary very much with districts. But for the country as a whole the position is as follows:

In the case of the class of labourers most important to small holdings,

unmarried men living on the holdings, pay consists of annual wages in cash and board and lodging. The importance of these several kinds of pay varies much with districts, but, taking an average for the whole country a man's annual wages are 489 crowns, and his food is valued at 657 crowns, that is 1.80 crowns a day, so that his work brings him in altogether 1,146 crowns a year. For a woman the corresponding averages are 286 crowns, 532 crowns 1.46 crowns a day and 818 crowns. In Norrland principally clothes are also given, and are sometimes fairly valuable.

In the case of married men generally who, under the name of *statare* (agricultural labourers earning mixed wages), work on the large holdings of the agricultural districts properly so called, and who receive, in addition to their annual wages which average 457 crowns, a payment in kind called *stat* which consists of milk, corn, potatoes etc., and are housed with their families, earnings average 1,256 crowns a year. This sum comprises the value of the free lodging, which in South Sweden usually consists of two rooms and a kitchen, but in the rest of the country is generally a single room of a letting value estimated as 83 crowns, in addition to which free fuel, of the average value of 105 crowns, is also given. All these data concern only ordinary ploughmen; for the *statare* workmen employed on stock receive higher money wages and in some cases larger wages in kind, so that their annual earnings are estimated at 1,320 crowns.

Side by side with the men earning mixed ages (*statare*) there are day-labourers in fixed employment who are paid not at all or hardly at all in kind, and whose daily wages vary much with districts. They average 4.25 crowns in summer and 3.20 crowns in winter, but are reduced, on an average by 1.28 crowns in summer and 0.96 crowns in winter, if the worker is fed by the employer.

In addition to the day-labourers usually engaged to work for a year or at least six months for one employer, there are agricultural labourers who work first for one and then for another employer, as the needs of the moment dictate. In summer the daily wages of one of these casual labourers average 5 crowns, in winter 4 crowns. They feed themselves. If fed by their employer their pay averages 3.43 crowns in summer and 2.63 crowns in winter.

Among the labourers receiving daily wages are many women, who are employed as helps in beetroot and potato cultivation, during the hay and corn harvests, etc. They receive on an average 2.60 crowns a day in summer or 2 crowns with food, if they are considerd to belong to the farm's fixed staff. If they are casually employed their summer wages are slightly higher namely, on an average for the whole country, 2.95 crowns without and 2.29 crowns with food. In the winter months these women's wages diminish noticeably, as do those of the men in the same category of labourers.

If the increase of the wages of the chief groups of agriculturel labourers be considered as a whole, for the period of crisis, it is found that in the years from 1913 to 1917 the total pay of lodged and boarded workers increased by about 70 per cent.; that of the men receiving mixed wages (*statare*) by about 75 per cent. But this increase depends especially on the greatly increased

value of payments in kind, for the increase in wages in cash was about 50 per cent. for the workers lodged and boarded, about 40 per cent. for those receiving mixed wages. Wages in cash therefore rose proportionately more for the former than for the latter group, and the inverse proposition is true in the case of wages in kind. The daily wages of day-labourers rose by from 60 to 84 per cent., the increase being greater in the case of winter than in that of summer wages and in the case of men than in that of women. The general rise in the level of wages from 1913 to 1917 may be placed at from 50 to 60 per cent.

This increase in wages occurred chiefly in the period from 1916 to 1917, if the case be excepted of men earning mixed wages (*fatare*) whose pay had already markedly increased in value as a consequence of the general rise in prices.

The rise in the wages of all the groups of labourers, taken together, in 1917 only, may be estimated as one of about 25 per cent.

SWITZERLAND.

FEDERAL SUBSIDIES GRANTED TO LAND IMPROVEMENT in 1918. — Report of the Swiss Department of Public Economy on transactions in 1918.

Federal subsidies were granted to land improvement in 1917 at the average rate of 23.5 per cent. which rose in 1918 to 25.5 per cent. The number of schemes subsidized in 1918 (231) had slightly decreased as compared with that of those of 1917 (248), but the total sum allotted in subsidies in 1918 had more than doubled, being 2,592,330.50 francs as against 1,221,965.50 francs in 1917. This is due in the first place to the fact that only a certain number of important subsidized enterprises had very high specifications; in the second place to the circumstance that both labour and material had become much more expensive since 1917. Another reason for the increase of the subsidies lies in the higher rate at which subsidies for such land improvement as will immediately increase the soil's yield are granted, on condition the cantons and persons not benefiting by the grants allot a subsidy at the same rate. Thus, in the cases of sanitation, the breaking-up of land and other works of this kind, the rate of the subsidy has been brought up to 30 per cent., and in that of the redistribution of land into lots to 35 per cent. of the specification. To improvements of the latter category the provisions of the Federal Council's decree of 23 March 1918 as to the redistribution of land into lots are applicable. By these provisions the federal subsidy to be granted to enterprises of the kind, within a territory of which there has not yet been an approved official survey, is increased by at least the sum saved by the fact that the official survey of the land to be redistributed has not yet been made. This increment amounted for each enterprise to a minimum of 5 per cent. of the costs of the redistribution.

As to the extent of the work accomplished in 1918 in the matter of land improvement in the several cantons we have the data contained in the following table :

Number of Schemes and Federal Subsidies Allotted and Paid.

Cantons	No. of schemes	Federal subsidies allotted	Federal subsidies paid
Zurich	1	84,000 —	112,096 42
Berne	8	406,610 —	187,630.18
Lucerne	17	115.221 —	45,200 —
Uri	—	—	6,346.80
Schwyz	—	—	16,875 —
Obwald	9	66,441.80	2,255.40
Nidwald	1	4,000 —	8,034.10
Claris	6	8,855.60	18,780 75
Zoug	6	10,800 —	4 653.35
Fribourg	27	97,904 —	84,987 54
Soleure	5	32,80 -	11,437 50
Basle-Country	7	58,875 —	48,137.22
Schaffhousen	10	65,902.50	391 —
Appenzell-Rh. ext.	4	5,425 —	8,000 —
Appenzel-Rh. int	1	3,375 —	3,000 —
St. Gall	32	83,705 —	67,988.22
Grisons	24	77,065 -	—
Argovia	18	204,170 -	106,935 —
Thurgovia	9	43,800 -	9,295 90
Tessin	7	22.922,50	38,750.30
Vaud	21	702,992.50	123,000 —
Valais	15	262,534 85	13,526.65
Neuchâtel	2	59.725 —	212.35
Geneva	1	174,950 —	3,561.60
1918	231	2,592,330 75	921,095.34
1917	248	1,221,965 50	890,600.76

Apart from the schemes indicated, numerous works of land improvement, for which it has not yet been possible to fix subsidies, have been begun with the consent of the federal authority.

As in the past, subsidies amounting to 78,639.80 francs have been allotted to various cantons as representing the Confederation's contribution to the maintenance of their agricultural engineers. A sum of 1,521.60 francs was spent in 1918 on the inspection and examination of schemes of land improvement.

The budget appropriation was entirely utilized. Including a small sum repaid by one canton, the total sum spent was 1,001,310.70 francs. It was not possible to pay anything into the improvements fund in 1918, but this fund none the less amounted to 357,891.70 francs, that is to the same sum as in 1917.

On 24 June 1918 the Department of Public Economy was authorized to make to cantons advances bearing interest at the rate of 4 ½ per cent. to promote works of land improvement which are of eminent public utility and affect lands which can at once be brought to a productive state when these works are so costly that to find the necessary funds for them is difficult. Two cantons availed themselves of this opportunity in 1918 and applied for advances amounting to 1,060,000 francs.

RUGGERI ALFREDO, gerente responsable.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall:

(*a*) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets;

(*b*) communicate the above information as soon as possible to those interested;

(*c*) indicate the wages paid for farm work;

(*d*) record new diseases of plants which may appear in any part of the world, show ing the regions infected, the progress of the diseases, and, if possible, any effective remedies;

(*e*) study questions concerning agricultural co-operation, insurance, and credit from every point of view; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit;

(*f*) submit for the approval of the various governments, if necessary measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10*d.*	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	1*s.* 1 1/5*d.*	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69906	acres
1 Dinar, gold (100 para) (Serbia)	=	9 32/64*d.*	at par
1 Dollar, gold ($) (100 cents) (United States)	=	4*s.* 5/16*d.*	at par
1 Drachm, gold (100 lepta) (Greece)	=	9 33/64*d.*	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1*s.* 7 33/64*d.*	at par
1 Franc (100 centimes) (France)	=	9 33/64*d.*	at apr
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 32/64*d.*	at par
1 Leu (100 statinki) (Bulgaria)	=	9 33/64*d.*	at par
1 Lira (100 centesimi) (Italy)	=	9 33/64*d*	at par
1 Litre	=	0.21998	gallons
		0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4*d.*	at par
1 Mark (100 penni) (Finland)	=	9 33/64*d.*	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	2*s.* 2 61/64*d.*	at par
1 Milreis, gold (Portugal)	=	4*s.* 5 19/64*d.*	at par
1 Peseta, gold (100 céntimos) (Spain)	=	9 32/64*d.*	at par
1 Peso, gold (100 centavos) (Argentina)	=	3*s.* 11 37/64*d.*	at par
1 Pound, Turkish, gold (100 piastres) (Ottoman Empire)	=	18*s.* 0 15/64*d.*	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	2*s.* 1 3/8*d.*	at par
1 Rupee, silver (16 annas) (British India)	=	1*s.* 6*d.*	at par
1 Talari (20 piastres) (Egypt)	=	4*s.* 1 11/32*d.*	at par
1 Verst (Russia)	=	1166.61479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	2*s.* 0 37/64*d.*	at par
1 Zentner (Germany)	=	110.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE

BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

SPAIN.

THE MOVEMENT FOR AGRICULTURAL ASSOCIATION.

SOURCE:

ACCIÓN SOCIAL. MEMORIA ESTADÍSTICA SOCIAL AGRARIA DE LAS ENTIDADES AGRÍCOLAS Y PECUARIAS EN 1º DE ABRIL DE 1918. Ministerio de Fomento. Dirección general de Agricultura, Minas y Montes (*Social work. Statistical, Sociological and Agricultural Memoir on Farming and Stockfarming Institutions on 1 April* 1918. *Ministry of Fomento. General Department of Agriculture, Mines and Forests*). Establecimiento tipográfico Fordesillas. Madrid, 1918

The General Department of Agriculture, Mines and Forests has recently published a statistical memoir whence we borrow the data we are about to give. They refer to the position on 1 April 1918 of the movement in Spain for agricultural association.

If we compare the total figures given in this memoir with the figures in analogous earlier publications (1), it becomes evident that this movement in the Spanish countryside has progressed of late years. Thus in 1912 there were 2,029 agricultural institutions in Spain and in 1918 as many as 3,353.

These bodies were distributed among kinds of institution as follows:

Chambers of Agriculture	100
Agricultural Societies	96
Agricultural Federations	24
Agricultural Associations	575
Agricultural Syndicates	2,009
Rural Banks	503
Economic Societies	46
	3,353

(1) See our issues for March and May 1915, "Co-operation in Spanish Agriculture".

If we compare these data with those of analogous classes of agricultural institutions in 1912 we find that the differences are as follows:

	1912	1918	Increase
Chambers of Agriculture	93	100	+ 7
Farmers' Societies	80	96	+ 16
Savings and Loan Banks	85	503	+ 418
Agricultural Trades Unions (1). .	1,771	2,009	+ 238

If we now examine the geographical distribution of the 3,353 agricultural institutions in Spain, as shown by the last statistics, we obtain the following table:

Aragon and Rioja	452
Old Castille	451
Catalonia and the Balearic Islands	396
Leon	347
Levante (Valencia and Murcia).	337
Navarre and Biscay	275
Galicia	268
New Castille	258
Cantabric District (Asturias and Santander) .	238
Extremadura	153
Andalusia	150
Canaries	28
Total . . .	3,353

These figures all, in varying proportions, comprise each of the kinds of institution mentioned previously. The greatest number of chambers of agriculture, namely 32, is found in Catalonia; the greatest number of agricultural societies, 30, in Levante; the greatest number of federations, 4, in Old Castille; the greatest number of agricultural associations, 130, in Galicia. Syndicates also are most numerous in Old Castille where there are 373 of them, and rural banks are most found in Navarre where they number 159.

As regards the distribution of all agricultural institutions, the largest number of them, 202, are found in the province of Burgos, and the least, 4, in that of Jaen.

(1) We should note that the statistics anterior to 1918 include agricultural associations under the heading, "agricultural syndicates". If 575, the number of the associations in 1918, be added to 2,009, that of the syndicates, we arrive at 2,584 institutions, or 813 more than the number of similar institutions in 1912.

To conclude our survey of these data we reproduce figures as to the membership, capital, investments, funds and loans of the institutions.

Agricultural institutions	No. of institutions	Membership	Capital		Savings bank deposits	Funds obtained		Loans to farmers		
			Share and guarantee capital	Real estate and public funds		in *Banco de España*	In other institutions	on personal security	on pledged property	on mortgages
			pesetas	pesetas	pesetas	pesetas	pesetas	pesetas	pesetas	pesetas
Chambers of agriculture	100	20,969	2,060	—	—	—	—	73,901	—	—
Farmers' societies	96	121,468	971,167	—	—	—	—	—	—	—
Agricultural federations	24	22,471	—	—	—	—	201,302	106,728	—	—
Agricultural associations	575	135,776	—	—	—	150,000	59,840	1,174,660	—	—
Agricultural syndicates	2,009	211,525	—	—	—	1,243,710	19,810,598	14,452,564	—	—
Rural banks	503	51,502	146,314,437	2,038,156	11,631,266	3,427,278	2,163,997	8,317,052	713,316	6,882,146
Economic societies	46	7,318	104,653	—	—	—	—	—	—	—
Totals	3,353	571,029	147,492,297	2,038,156	11,631,266	4,820,988	22,235,737	24,124,905	713,316	6,882,146

Having examined these general data as to Spanish agricultural institutions, we will give some of the information, supplied by the memoir which is our authority, as to each individual kind of institution.

Chambers of Agriculture. — The constitution of these is based on the decree of 14 November 1890 (1). It is their general aim to defend and advance the interests of agriculture, rural property, crops and rural industries. Of the chambers of agriculture, whose total membership is shown in the preceding table, those of Barcelona and Murcia have the highest membership, namely 4,909 and 2,795, and those of Toledo and Palencia the lowest, namely 33 and 47 respectively.

The loans, amounting to 73,901 pesetas, are distributed as follows: 42,363 pesetas by the Chamber of Barcelona and 31,538 pesetas by the Chamber of Murcia. These are the only chambers which have made loans to farmers.

Farmers' Societies. — This form of Spanish association was established by the law of 8 July 1898 (2). The characteristic activity of these societies is represented by rural police syndicates and by arbiters whom the societies elect. Their mission is to see that rural property-rights and crops are respected, that rural roads are opened up and maintained in good state, and that the courses for the outflow of running and stagnant water are kept clean. Within

(1) See our issue for November 1914, page 5.

(2) See our issue for August 1914, pages 3-18.

this general sphere of action the societies vary very much as regards the importance of their work, which depends on the special circumstances of the district in which they are active. Having regard to their aim and the autonomy granted to them, associations of this form are evidently among those destined to obtain the greatest benefits for the farmers of Spain.

Societies of this kind have the largest membership in the provinces of Castellón de la Plana and Badajoz, where they have 27,225 and 20,667 members. The societies of the provinces of Albacete and Burgos have the smallest membership, namely 77 and 450. The province of Valencia contains the society having the largest capital, namely 228,806 pesetas.

Agricultural Federations. — Although these do not, like the farmers' societies, represent an official organization, they are noteworthy as forming a link in the national organization, for they gather up for expression the aspirations of rural Spain, of which they are the real representatives through the medium of their publications, congresses and meetings, and finally of their means of influencing the public authority. In the memoir which is our authority there is special mention of the *Federación de sindicatos Católicos de la Rioja*, the *Federación Católica agraria de Astorga*, and the *Federación agrícola Mirobrigense* (1).

The first of these federations was constituted in 1910, being formed of 12 syndicates. On 31 December 1917 it included 153 syndicates having a total membership of 13,826. Its assets amounted to 753,048 pesetas. At its central savings and loan bank there were deposits amounting to 474,475 pesetas, and the loans it had made amounted to 467,876 pesetas.

Besides the important work of the Federation of La Rioja in responding to countless requests for advice, in making known, by its printed matter, by lectures and by articles, methods of improvement applicable to various soils and crops, and in analysing all the material to be used in agriculture, it has supplied seeds, saplings for forestry, machinery, material needed for viticulture, sulphur, sulphate of copper, soda and various articles of consumption, of the total value of 2,185,894 pesetas. It also has a library aiming at the diffusion of literary education among country people, and it publishes the *Boletín de la Federación* which is concerned with social and agricultural questions, supplies, markets, and other matters important to the agricultural class.

The federation of La Rioja has also set up a department for insuring against hail. In 1917 the members of 22 syndicates insured their vines for a capital sum of 622,873 pesetas. Total losses amounted to 38,272 pesetas and the maximum assessment, namely 3 ½ per cent., being made, compensation was given for 56.96 per cent. of the losses incurred.

The *Federación católica agraria de Astorga* was formed in December 1913, and in December 1917 it grouped 93 trades-unions. This federation has organized lectures connected with its work in all the centres of population in the district, has established experimental and model fields, and has

(1) See our issue for February 1916, page 43.

a central bank in which there are deposits amounting to 256,813 pesetas, 150,991 pesetas being the sum to be ascribed to 1917. During 1917 this federation's collective purchases were as follows: manures — 1,674,100 kilogrammes for 330,980 pesetas; cattle foods — 310,000 kilogrammes for 110,780 pesetas; agricultural machinery — 3,434 pesetas; articles of consumption — 31,932 pesetas; other purchases — 6,283 pesetas.

Finally, the *Federación agrícola Mirobrigense*, which includes 33 syndycates was founded in 1909. Its work is to advance the movement for agricultural association and to defend the interests of its member institutions who pay an annual subscription of 10 pesetas each. It has established a popular savings-bank where the deposits on 31 December 1917 amounted to 375,251 pesetas. It had then made loans on personal security up to the amount of 195,678 pesetas.

In April 1918, twenty-two agricultural federations were active in Spain, the oldest of them being the *Federación agrícola Catalano-Balea,* (1) founded in 1899.

Agricultural Associations. — These associations have, as a rule, been constituted under the 1887 law on associations (2). Many of them have successfully claimed to be within the scope of the 1906 law on agricultural syndicates, and have thus come to enjoy the benefits of this law.

As regards the membership of these associations, this is largest in the provinces of Madrid and Castellón de la Plana, namely 45,741 and 23,473, respctively; and smallest, namely 28 and 48, respectively, in the provinces of Segovia and Cuenca. The associations which have granted the largest sum in loans are those in the province of Saragossa which have lent 303,963 pesetas in cash and 93,052 pesetas in kind. The importance of these figures is fully realized when it is remembered that the farmers' associations, of Saragossa only, have 9,766 members altogether.

Among the agricultural associations those which deserve special mention, because of the importance of their work and their services to farmers, are the *Asociación general de Ganaderos del Reino*, which has offices in Madrid, the *Asociación de Agricultores de España* (3), the *Asociación de Labradores* (4) and the *Casa de Ganaderos* of Saragossa, and the *Instituto Agrícola Catalán de San Isidro* of Barcelona.

Agricultural Syndicates. -- These are based on the law of 28 January 1906 and the rules of 16 January 1908 for the application of that law. Their form is, as their results show, that most appropriate to the development of agricultural association in Spain.

Agricultural syndicates are especially abundant in the province of Burgos which has 181 of them. They are fewest, numbering only two, in the province of Cadiz.

(1) See our issue for November 1913, page 19.

(2) See the article already cited, "Co-operation in Spanish Agriculture".

(3) See our issue for January 1917, pages

(4) See our issue for July 1915, page 47.

The maximum memberships of syndicates, namely 24,750 and 12,768, are found in the provinces of Barcelona and Valencia, respectively ; the corresponding minima, 143 and 252, occur in the respective provinces of Almeria and Avila.

In the matter of the resources they secure the unions of the province of Tarragona lead, for they number 61 and their resources amount to 12,344,978 pesetas. In the matter of loans, the lead is taken by the province of Saragossa where 98 syndicates have lent their members 207,134 pesetas in cash and 422,983 pesetas in kind.

Rural Banks. — The memoir of the Ministry of *Fomento* states that a campaign had been initiated in Spain for the foundation of these banks before the 1906 law as to agricultural syndicates came into force. When the banks belong to these unions they are governed by this law and enjoy the exemptions and benefits it grants. In all other cases they are formed under the general law on associations of 1887 (1).

The two types of rural banks most usual in Spain are the Raiffeisen and the Schultze.

The province in which rural banks have developed most is that of Badajoz where 20 banks have 6,111 members and a capital of 128,027,793 pesetas (2), to which the value of their real estate and holdings in public funds, namely 551,565 pesetas, must be added. These banks had lent their members 1,539,929 pesetas on personal security, 362,161 pesetas secured by pledged goods, and 6,009,978 pesetas on mortgages. They had, on 1 April 1918, savings deposits amounting to 6,310,870 pesetas.

The Economic Societies of the Country's Friends. — These societies have purely abstract aims, namely the promotion and development of the country's wealth in all its aspects by lectures, competitions, shows, etc.

They were among the earliest to be founded, the first of them having been constituted at Madrid in 1875. For many years they have acted as compulsory advisory bodies whenever an official measure aimed at the increase of public wealth has been mooted. Of the 46 economic societies now in existence, the most important is that of Seville which has 827 members.

(1) See the article already cited, "Co-operation in Spanish Agriculture".

(2) To understand this high figure it is necessary to remember that the capital in question is one secured by the collective and unlimited liability of the members. In other words, the capital of the rural banks of Badajoz is represented by the property owned by their members, who are usually rich landowners, as is proved by the fact that the capital of the Rural Bank of Fregenal by itself amounts to 20,022,005 pesetas, while that of the five other banks exceeds ten millions.

DUTCH INDIES.

RECENT LEGISLATION AS TO AGRICULTURAL CO-OPERATIVE SOCIETIES IN THE DUTCH EAST INDIES

by H. M. R. LEOPOLD.

SOURCES:

STELSEL EN INHOUD VAN DE VERORDENING OP DE COÖPERATIEVE VERENIGINGEN (*Organization and Regulations provided by the Laws as to Co-operative Societies*). Notes by Dr. J. H. Boeke in collaboration with Mr. K. L. J. Enthoven. Published by the Popular Credit Institution, Batavia, at the State printing-press, 1918.

HANDLEIDING BIJ DE OPRICHTING VAN COÖPERATIEVE VERENIGINGEN VOOR INLANDERS (*Handbook as to the Constitution of Co-operative Societies among Natives*). Ibid., 1918.

VERZAMELING VAN VETTELIJKE VOORSCHRIFTEN BETREKKING HEBBENDE OP COÖPERATIEVE VEREENIGENGEN, met korte toelichting op eenige daarvan. — Koempoelan atoeran-atoeran oendang-oendang berkenaan dengan perhimpoenan-perikatan jang tolong menolong (Koperasi), dengan keterangan pendik atas beberapa atoeran itoe (*Collection of Legislative Rules as to Co-operative Societies with short notes on certain of them, both Dutch and Malay*). Published by the Popular Credit Institution, Albrecht and Co. Press, Weltevreden (Dutch Indies), 1918.

Recent legislation in the Dutch Indies as to co-operative societies is derived directly from Dutch legislation. The story of the latter begins in 1874, the year in which the Minister of Justice refused to recognize as legal persons co-operative societies founded on the basis of the law of 22 April 1855 as to bodies having a moral purpose. Co-operation, which had hitherto developed progressively, was by this sudden innovation left without a legal basis, and therefore it was necessary at once to prepare a law which would exclude limited liability societies and bodies having a moral purpose but limit the development of the growing institutions as little as possible. The law which was afterwards approved has in fact this character to a striking degree. Although some deputies would have given a character rather social than legal to the rules when these were under discussion, the indifference of the majority to the moral and economic aspect of co-operation was such that the bill approved had a purely legal value. Only the control provided by absolute publicity was rigidly prescribed; for the rest, "the fullest liberty was left to the co-operators and every form of State intervention was excluded". In other words, the legislative assembly hesitated to face the social problem, and took under its care only the interests of non-members of co-operative societies, which were then of far greater moment to the authorities than the opinion of the co-operators as to the principles of co-operation. The indifference to the social aspect of the problem is also a result of the very considerable foundation and management expenses which greatly outweigh the fiscal privileges of exemption from the stamp and registration duties. (In Hol-

land the foundation of a society involves the expenditure of from 70 to 125 florins; in the Indies the notary's deeds cost 15 florins; the other costs are fixed by special, somewhat high tariffs.) The system established by the law does not contemplate a granting of subsidies to co-operation nor any form of State control. When however the proposal to subsidize the banks of co-operative agricultural credit was approved in 1898 by a relatively weak majority, the fundamental idea of the law was undoubtedly violated. It cannot however be said that the principle was entirely abandoned. The subsidies are granted only to the banks of agricultural credit, to the exclusion of all other co-operative associations, and they never exceed 10,000 florins a year; special officials to inspect or assist the societies were not nominated and the State never did active propaganda work. On the whole faith was kept with the principle that the government should confine itself to making co-operation possible, and that the management of the associations instituted should remain with those interested. The State did not wish to assume the task of popularizing co-operative principles and renounced all right of intervention, and could not therefore supervise the management of the co-operative societies.

We have now explained the aim of the Dutch law on co-operative societies, the system it introduced, and the main lines of the corresponding system in the Indies.

In Holland the system yielded good results. The government judged that the people were fit to manage the co-operative movement directly and develop it regularly, and results corresponded to expectations.

Starting from the same point of view where natives were concerned, the Director of Justice proposed in 1910 to apply the Dutch law to the Indies. The governor asked for the opinion of the "adviser" of the Popular Credit Institution, who expressed himself very clearly. The communal administration provides, he stated, for one part of the social interests of the native population, being especially adapted to satisfying the general needs of those within its sphere. Independently of such communal association, societies exist which are formed for the guardianship of private interests and are mutual or limited liability societies in form. If these societies do not acquire a large importance and limit their activity to villages, parochial patriotism and public opinion are enough by themselves to make the members fulfil their obligations, and no one is conscious of a need for incorporation. For these small bodies a law on co-operation has therefore no interest. But the question is very different in the case of wider associations which are active beyond the narrow confines of their villages. Legislation of the kind would be very profitable to these. But it should not be legislation on the native plan which would give a co-operative society the right to take paddy-fields and palm-groves as security, as the rich villagers do individually. What indeed would remain of a small cultivator's agricultural capital if the wealthiest men could combine in order to become possessed of the land of their debtors, almost by surprise?

Moreover a native official is not usually competent to deal with the

frequently difficult points which arise in large co-operative societies in connection with the interpretation of rules and financial matters. If co-operation were based on European law, the small communal unions would be excluded, which would be no great loss since their interests mostly do not go beyond their own circle and are cared for by local public opinion. One member could represent a society before the native judge. In the case of more important disputes the societies would feel a need to possess legal personality in order that they might avail themselves of European law. Equality before the law would be the ideal equality between the two races which live together in the Indies.

Following on these recommendations, the government of the Indies brought before the Dutch government in September a bill which was not approved until April 1915 nor applied until 1 August 1916.

On the basis of this law every association is able to constitute itself a body having a moral purpose or a co-operative society. In both cases the legal personality acquired is regulated on the European system, and the right to deal with business under native law is not conceded. Thus, a co-operative society may not acquire lands owned by a native or take them as security, and may take them on lease only in accordance with the regulation as to agricultural leases. Although co-operative societies are still constituted in the Indies in accordance with the royal decree of 1870 as to bodies having a moral purpose (a society of native tobacco-growers in the "Preanger Regentschappen" was recognized to be such a body by the government on 31 December 1917) the provisions of this decree are so vague that the new law on co-operative societies is far preferable to it.

The foundation of a co-operative society in accordance with the royal decree of 1915 takes place by means of a notary's deed, which must be approved by the government and is deposited in the office of the court and published in the *Javasche Courant* and in two local newspapers, one Dutch and one Malay. It is well that the government approval should precede the notary's deed, and that a competent person, such as the adviser of the "Popular Credit Institution", should be consulted. The deed of foundation should contain: (1) the name of the association — to include the adjective "co-operative" and an indication of its object — and its address; (2) the names, addresses and trades of the founders; (3) the sum which limits the liability of each member; (4) the rules to which the management and the system of supervising the association's activity are subject; (5) the association's term of duration which may not exceed thirty years but can be prolonged; (6) the date at which the business year begins: (7) conditions of the admission and resignation of members. Rules must also be laid down with regard to the rights of the general meeting, the distribution of profits, the possibility of extending the sphere of activity even to include non-members, the right to vote, etc.

The management of a co-operative society must compile a list of members, to receive the signature of the district magistrate, and to be kept up to date day by day and freely placed at the disposal of all who ask for it. This list affords the sole proof of a member's status as such.

Every new member must therefore sign it, presenting a deed obtained from a notary, and a document signed by an official of the management, whether a European or a native. The official keeps a copy of the document. The price of the original and of each copy is 0.50 franc.

The management of the association is appointed by the members, not necessarily from among themselves. In case of negligence —delays in the administrative practice, in keeping the list of members, etc. — the management may be condemned to pay a fine, limited to a minimum of 1 franc and a maximum of 50 francs.

In a co-operative society the larger powers are entrusted to the general meeting, this state of affairs being an indirect result of the provision that the competency of the management is revokable at any moment, and that one fifth of the members can summon a general meeting even against the will of the management. It is advisable to have the minutes of general meetings kept, for resolutions are thus defined, and the members have a means of controlling the management's execution of resolutions. Besides appointing the management, the general meeting must examine its actions, either directly or by means of a permanent committee. The law gives a first place to the necessity that the acts of the management should be proved to have been justified. Financial results must be communicated not only to members but also to non-members, the report being deposited at the office of the district court where it can be seen by all men. If a co-operative society asks for a special inspection the inspectors must be nominated by the members, not necessarily from their own number.

Every member of a co-operative society is personally liable for all the society's engagements, but the extent of his liability is not defined by the law. A call is made upon this liability by the society's conditions only in the case of the dissolution or failure of the society. The effect varies with the provisions of the rules and can be nil if the rules limit liability to paid-up capital. Members of the past year are also liable whatever may have been the cause of their ceasing to belong to the society — resignation, death, expulsion.

A co-operative society may cease to exist: (1) because the general meeting resolves, in conformity with the rules, to dissolve (to prevent a flourishing society from dissolving in order to divide its capital and reserve, it is well to provide in the rules that in case of a dissolution all assets go to a social institution); (2) because its term of duration has ended; (3) because there have come to be absolutely no members (an association continues while there is one member); (4) because the magistrate deprives the society of legal personality in consequence of a breach of law; (5) because the society has failed.

Since the law of the Dutch Indies on co-operative societies is of recent date and is being applied in a very critical time it is not yet possible to judge of its effects.

ITALY.

COLLECTIVE LEASES IN THE PROVINCES OF PARMA, BOLOGNA AND FERRARA AND IN LOMBARDY.

SOURCES:

LO SVILUPPO DELLA COOPERAZIONE AGRICOLA PARMENSE (*The Development of Parmesan Agricultural Co-operation*). — Report to the Provincial Congress of Agricultural Labourers, 10 March 1919. Federation of Agricultural Co-operative Societies of the Province of Parma. Parma, Tipografia Coop. Parmense, 1919.

PROSPETTO STATISTICO DELLE SOCIETÀ AGRICOLE ADERENTI ALLA FEDERAZIONE PROVINCIALE DELLE AFFITTANZE COLLETTIVE AL 31 DICEMBRE 1918. (*Statistical Review of Agricultural Societies belonging to the Provincial Federation of Collective Leaseholders on 31 December 1918*). In *Bollettino dell'Istituto provinciale di assistenze sociali di Bergamo*. Bergamo, No. 12, December 1918.

CONSORZIO PROVINCIALE BOLOGNESE DELLE COOPERATIVE AGRICOLE: DATI STATISTICI AL 31 DICEMBRE 1918. (*Bolognese Provincial Consortium of Agricultural Cooperative Societies: Statistical Data to 31 December 1918*). In *La Cooperazione Agricola*. Bologna, No. 19-20, 1 October 1918.

BOLLA (Gaetone). Le cooperative di produzione agraria (*Co-operative Societies for Agricultural Production*). Florence, 1912.

In our issue for May 1918 we showed the origin and general character of the collective leases of Italy which are a characteristic manifestation of agricultural co-operation, and we dwelt especially on the societies holding such leases which have been constituted by the labourers of Emilia, and which are the most interesting on account of their form and the results to which they attain. We examined in particular the organization of collective leaseholding societies in the provinces of Reggio Emilia, Ravenna, Parma and Bologna. Afterwards, in our number for August of the same year, we dealt with the similar societies of the provinces of Modena, Mantua and Sicily. We will now give more recent information as to the collective leaseholding societies in the provinces of Parma and Bologna and some data as to collective leases in Lombardy.

§ 1. THE COLLECTIVE LEASEHOLDING SOCIETIES OF THE PROVINCE OF PARMA.

The collective leaseholding societies in this province, as in all the Emilian provinces generally, originated in the necessity of finding an effective remedy for the unemployment which emigration did not lessen (1). To assist the struggle against unemployment, rendered acute in recent

(1) ANTONIO BIZZOZERO. *Le affittanze collettive per assicurare il pane e il lavoro agli umili*, Unione delle Cattedre Ambulanti di Agricultura Italiane. Opuscolo di propaganda No. 1. Parma, Tip. Pelati, 1917.

years by the diminution of public works, is the chief aim of the societies. Although they are all of recent date they have already attained to such a considerable degree of development as we think it well, for the sake of the principle involved, to describe in all its details, taking as our basis the data collected by the local federation. The examination of results obtained will suffice to give a correct idea of the possibilities of this system of co-operatively farming land by associations of agricultural labourers, and of the advantages of extending it and encouraging it by adequate means.

We will first see in the following table what societies of the kind in question had arisen in this province, and what were their membership and the value of their capital and reserve funds and of their live and other stock on 31 December 1918.

TABLE I. — *Collective Leaseholding Societies in the Province of Parma.*

Situation	Name	Date of incorporation	Membership	Capital and reserve funds	Capital live stock	Machinery and implements	Lands buildings
				liras	liras	liras	liras
Borgo San Donnino	*L'Agricola*	25-2-1917	158	40,584.35	51,691.37	52,444.74	—
Busseto	*L'Avvenire*	4-9-1917	26	3,486.14	71,950.00	27,400.00	—
Colorno	*Lavoro e agricola*	11-8-1902	420	30,040.00	54,877.00	8,000.00	—
Fontanelle		31-12-1907	380	112,412.63	332,400.00	47,752.89	13,600
Ravadese		13-12-1912	29	8,205.71	76,500.00	4,600.00	—
Sissa	» »	31-1-1910	126	40,120.00	105,950.00	25,913.40	23,500
Soragna	*Sempre avanti*	25-2-1917	64	14,284.72	251,810.00	66,948.00	9,200
Fontanellato	*L'Emancipazione*	23-6-1918				—	
Roncocampocaneto	*La Fratellanza*	26-8-1917					
San Prospero Parm.	*L'Emancipatrice*	3-11-1918					
		Totals...	1,238	249,133.55	945,178 37	233,059.03	46,300

The co-operative societies of Borgo San Donnino, Busseto, Colorno, Fontanelle, Ravadose, Sissa, Soragna and Ronco-Campo-Caneto held on lease altogether on the aforesaid date 3,812 *biolche* (1), or 1,174.4772 hectares of land, for a total annual rent of 230,544 liras. The co-operative society of Fontanella managed seven farms (997 biolche), that of Soragna five farms (867 biolche), those of Colorno and Sissa four farms each (458 and 345 biolche, respectively), and those of Borgo San Donnino, Busseto, Ravadese and Ronco-Campo-Caneto two farms each (190, 499, 260 and

(1) The Parmesan *biolca* is equal to 3,081 square metres

196 biolche, respectively). These farms were owned by religious foundations, communes or individuals.

As regards both their administration and book-keeping and their technique these co-operative societies, as appears from the report we cite among the sources of this article, work excellently. This is thanks to the efforts of those directing them who, in their leisure from private duties, have shown ability of no common order in overcoming difficulties due to the war, and thanks also to the supervision exercised by the Provincial Federation, the Office of Inspection of Parma and the Office of Agricultural Assistance of Bologna.

The societies are provided with mechanical ploughs and presses, threshing machines, etc. and neglect nothing to secure the cultivation of the land according to the dictates of modern agricultural science.

The farms have undivided management, only a very small number adopting the system of distributing profits in kind.

Financial resources are furnished by the *Istituto Nazionale di Credito per la Cooperazione* in the form of loans secured by a lien on harvests and live and other stock. In 1918 these grants reached a million liras and this year that amount will be almost doubled.

These co-operative societies are now organizing their book-keeping and management departments in a form suited to their development, regardlessly of the consequent increased expenditure. They are well aware that the good working of each society depends above all on the good working of its managing and book-keeping departments. Balance-sheets and budgets are made out with strictness and great care, the value of the live stock liable to accident and sickness being placed as low as possible, and sums being set on one side with which to meet eventual losses or to increase the capital and reserve fund.

The distribution of profits is so regulated that the highest percentage of them is paid into the reserve and thrift funds, the percentage paid on members' shares being proportionately less.

The high wages paid and the expenses incurred as above did not prevent a considerable net profit from being shown at the closure of the years 1917 and 1918, as appears from the following tables in which the various categories of the expenditure of the societies, the various crops they grew and the financial results they obtained are shown, supplying the elements of a definite and sure estimate of their working.

In 1916 the Parmesan collective leaseholding societies held altogether an area of 1043 biolche, which rose to 1188 biolche in 1917, 2217 in 1918 and 3346 in 1919, and will reach more than 4000 biolche in 1920 in virtue of the new leases already obtained by the co-operative societies of Fontanelle, Roncocampocaneto and Soragno together with the current leases.

However the societies are still far from disposing of an area which will allow then to ensure continuous employment to all their members, for whom, if a minimum average of 8 biolche were assigned to each, at least 9904 biolche of land would be needed. This is leaving out of account

TABLE II. — *Yield and profits in* 1917.

Crops	Borgo San Donnino			Colorno			Fontanelle			Ravadese			Sissa		
	Biolche	Quintals	Liras	Biolche	Quintals	Liras	Biolche	Quintals	Liras	Biolche	Quintals	Liras	Biolche	Quintals	Liras
Wheat	36	152	6,732.40	105	347.50	16,600	56	244.42	10,998.90	70	289	13,488.48	85	401.49	19,517.01
Maize	10	81	3,903.04	45	225.02	8,165.59	59	402.54	14,893.78	27	137.20	4,839.20	35	229.91	3,272.26
Beetroot	3	270	2,985.62	—	—	—	—	—	—	9	702.70	2,513.10	—	—	—
Tomatoes	—	—	—	13	514.34	7,186.75	9	330.66	5,290.46	6	280.38	4,344.33	—	—	—
Oats	3	11	660	8	12	320	2	22.26	667.80	8	25	882.27	25	105.80	3,853.30
Potatoes	1	40	1,160	—	—	—	4	105.88	1,694.72	2	66.10	1,203.22	1	8.46	178.40
Beans	—	9	900	—	—	—	—	6.11	671	—	5.45	217	93	2.70	348.25
Forage plants	33	25	375	145	967.50	17,415	99	254.60	4,221.87	138	843.98	14,443.48	—	770.86	9,925.21
Milk	—	147	3,779.12	—	212	5,314.15	—	594.82	15,435.46	—	230.70	8,074.50	—	299.23	7,136.10
Grapes	—	289	8,259.50	—	295.50	9,249.65	—	405.33	10,727.92	—	162.90	4,887.30	—	518.19	13,239.32
Cocoons	—	—	—	—	0.74	591	—	—	—	—	6.87	2,747.71	—	3.20	1,346.95
Wood	—	60	340	—	523	4,699.95	—	242	1,452	—	268.85	1,381.42	—	288	1,723.80
Miscellaneous	9	75	4,775.24	27	62	1,832.84	18	12.70	2,585	—	26	909.72	4	35	2,279.14
Totals	95	1,159	32,809.92	343	3,159.60	71,374.93	247	2,621.32	68,638.91	260	2,765.13	59,931.73	243	2,662.84	67,819.74
Profits of live stock. liras			7,184.60			10,028.96			38,337.88			28,246.23			25,757
Advances on crops »			4,152.75			—			—			—			—
Various receipts »						—			3,983.07			4,379.58			2,907.59
Total receipts »			44,147.27			81,603.89			110,959.86			92,557.54			96,484.33
Losses of the year. »			—			—			—			—			—
Balance »			44,147.27			81,603.89			110,959.86			92,557.54			96,484.33

TABLE III. — *Expenditure and losses in* 1917.

Items of expenditure	Borgo San Donnino	Colorno	Fontanelle	Ravadese	Sissa
	Liras	Liras	Liras	Liras	Liras
Members' labour liras	15,257.66	45,203.81	16,025	36,432	25,053.11
Casual labour »			26,581.07	9,895.10	10,836.64
Chemical manures, sulphur, sulphates, etc. »	4,592.96	4,965.49	5,461.10	7,000	18,500.90
Grain for sowing and various seeds »	1,114.35	910.30	621	2,889.35	624
Rent, etc. »	5,000	16,859.90	12,908.04	15,723	16,593.20
General expenses »	15,261.98	8,470.35	26,885.16	7,172.48	12,067.27
Miscellaneous expenses and losses »	—	—	19,950.75	10,606.09	12,440.15
Total expenditure »	41,226.95	76,411.85	108,430.12	89,718.02	96,115.27
Net profit »	2,920.32	5,192.04	2,529.74	2,839.52	369.06
Balance »	44,147.27	81,603.89	110,959.86	92,557.54	96,484.33

TABLE IV. — *Yield and Profits in* 1918.

Crops	Borgo San Donnino			Busseto			Colorno			Fontanelle			Ravadese			Sissa			Soragna		
	Biolche	Quintals	Liras	Biolche	Quintals	Liras	Biolche	Quintals	Liras	Biolche	Quintals	Liras	Biolche	Quintals	Liras	Biolche	Quintals	Liras	Biolche	Quintals	Liras
Wheat	78	291.30	17,405.17	62	422.66	25,532.50	135	563.63	34,752.46	90	478.70	27,764 —	90	494.17	29,205.45	135	713 22	42,793.20	164	612.90	35,845.60
Maize	20	134.62	6,057.99	5	49.49	2,227.05	71	390 —	17,270 —	64	459.91	20,234.64	24	140 56	6,325.20	40	279.96	12,290.37	49	307.20	13,711.75
Beetroot	3	317 —	3,343.70	25	756.62	7,173 56	—	—	—	—	—	—	6	206 —	2,394.90	10	1,237.05	13,041.40	25	1,738 —	16,713.40
Tomatoes	2	195 —	2,010.50	—	—	—	7	284.15	5,778.30	5	274 —	5,480 —	2	41.24	824.80	—	—	—	—	18 —	540 —
Oats	2	7 —	420 —	2	4.50	369 —	10	50 —	2,350 —	6	36 60	1,680 —	4	39.55	1,186.50	18	50 —	2,250 —	6	36.50	1,645.20
Potatoes	1	23.81	1,192 —	1	17.26	600.10	1	32 —	1,302.60	2	89.74	2,504.15	2	59 —	1,559.50	1	24.64	985.60	1	56.10	1,962.80
Beans	—	3.39	470 —	4	61.80	1,854.14	—	3 50	833.50	2	5 25	1,050 —	—	—	—	—	2 —	362.70	—	0.70	140 —
Forage plants	65	67 —	1,800 —	51	666 67	12,000 —	190	1,066 —	22,495.97	120	119 —	1,267 —	132	995 —	25,102.78	140	390.60	8,145.94	220	5,400 —	32,332.48
Milk	—	200.78	8,431.41	—	208.13	9,105.70	—	226.30	10,397.13	—	392.13	16,166.75	—	286 —	12,357.07	—	466.20	21,933.48	—	467 —	20,962.75
Grapes	—	430.39	23,407 —	10	273 —	15,511 02	—	340.26	18,858.92	—	340.41	18,679 98	—	182.96	10,611.68	—	451.53	22,626.10	—	279 47	17,228 50
Cocoons	—	—	—	—	1.32	2,107.30	—	0.94	950 —	—	2.91	3,162.84	—	8.87	4,437.20	—	3 —	5,252.50	—	3 —	4,326.25
Wood	—	406 —	822 —	—	182.67	1,826.86	—	449 —	4,483.71	—	166.15	2,481.95	—	411.80	4,105.40	—	—	—	—	749.93	7,949.30
Miscellaneous	19	159 —	2,118.45	4	41.47	411 —	44	114 —	3,403 —	10	66.24	4,487.35	—	36.50	1,054 —	1	98 —	10,672.45	—	—	—
Totals	190	2,235.29	68,368.22	200	2,685.59	78,748.23	458	3,539 78	122,875.59	299	2,431.14	104,958.66	260	2,901.65	99,165.06	345	3,716.20	140,353 69	465	9,688.80	159,740.03
Profits on stock	—	—	9,310.45	—	—	28,371.50	—	—	25,068.53	—	—	37,761 95	—	—	49,616.10	—	—	66,005.55	—	—	43.394.05
Advances on crops	—	—	6,403,81	—	—	10,360 —	—	—	—	—	—	39,030 —	—	—	6,000 —	—	—	10,165 —	—	—	37,410 —
Various receipts	—	—	98.85	—	—	6,600 81	—	—	—	—	—	15,675.68	—	—	7,813.23	—	—	2,622.40	—	—	9,060.52
Total receipts	—	—	84,181.33	—	—	124,080.54	—	—	147,944.12	—	—	197,426.29	—	—	162,594.39	—	—	219,146.64	—	—	249,613.60
Year's losses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Balance	—	—	84,181.33	—	—	124,080.54	—	—	147,944.12	—	—	197,426.29	—	—	162,594.39	—	—	219,146.64	—	—	249,613.60

TABLE V. — *Expenditure and Losses in* 1918.

Items of expenditure	Borgo San Donnino	Busseto	Colorno	Fontanelle	Ravadese	Sissa	Soragna
	liras	liras	liras	liras	liras	liras	liras
Members' labour	24,866.41	33,937.71	94,310.37	86,208.13	85,492.40	94,392.26	70,874.20
Casual labour				14,826.73	23,833.05	17,417.56	18,874.10
Chemical manures, sulphus sulphates, etc.	6,635 52	2,984.30	4,241.03	14,800.00	12,140.00	7,122.10	6,272.20
Grain for sowing and various seeds	2,362.60	4,298.95	51.90	2,620.00	4,382.26	5,489 31	9,690.36
Rent etc.	9,925.00	10,750.00	25,372.86	14,474.33	17,523.00	24,827.96	24,883.90
General expenses	30,780.11	31,601.11	17,004.50	36,728.69	10,616.04	32,561.71	53,239.09
Various expenses and losses	—	39,622.33	2,361.14	25,533.80	7,319.82	36,053.65	63,523.03
Total expenditure	74,569.64	123,194.40	143,341.80	195,191.68	161,276.57	217,864.85	247,356.88
Net profit	9,611.69	886.14	4,602.32	2,234.61	1,317.82	1,281.79	2,256.72
Balance	84,181.33	124,080.54	147,944.12	197,426.29	162,594.39	219,146.64	249,613.60

TABLE VI. — *General Summary.* (1)

Co-operative Society	1917						1918					
	Biolche	Total income	Total expenditure	Average income per *biolca*	Average expenditure per *biolca*	Net Profit	Biolche	Total income	Total expenditure	Average income per *biolca*	Average expenditure per *biolca*	Net profit
	no.	liras	liras	liras	liras	liras	no.	liras	liras	liras	liras	liras
Borgo San Donnino	95	44,147.27	41,226.95	464.70	433.96	2,920.32	190	84,181.33	74,569.64	443.05	392.47	9,611.69
Busseto	—	—	—	—	—	—	200	124,080.54	123,194.40	620.40	615.97	886.14
Colorno	345	81,603.89	76,411.85	237.91	222.77	5,192.04	458	147,944.12	143,341.80	323.02	312.97	4,602.32
Fontanelle	247	110,959.86	108,430.12	449.23	438.98	2,529.74	299	197,426.29	195,191.68	660.28	652.81	2,234.61
Ravadese	260	91,557.54	89,718.02	355.99	345.06	2,839,52	260	162,594.39	161,276.57	812.97	806.38	1,317.82
Sissa	243	96,484.33	96,115.27	395.05	395.53	369,06	345	219,146.64	217,864.85	635.20	631.55	1,281.79
Soragna	—	—	—	—	—	—	465	249,613.60	247,356.88	536.80	531 95	2,256.72
Totals	1,188	425,752.89	411,902.21	338.37	346 71	13,850.68	2121 7	1,184,986.91	1,162,795.82	534.50	524 49	22,191.09

(1) The differences found in this table between average income and expenditure per biolca ure due to the fact that some co-operative societies have not taken into account, in calculating receipts and expenditure, the produce distributed to those who took part in the farming.

the agricultural co-operative societies of Fontanellato and San Prospero Parmense which have not yet found any farm on which to start their enterprise.

In 1917, 352 biolche were planted in wheat and produced altogether 1434.41 quintals, or an average of 4.08 quintals per biolca or 14 quintals per hectare, 176 biolche were planted in maize and produced altogether 1065.78 quintals, or an average of 6.5 quintals per biolca or 20 quintals per hectare.

The following areas were cultivated in 1918 : 734 hectares, planted in wheat, yielded altogether 3576.58 quintals or an average of 4.87 quintals a biolca or 16 quintals a hectare; 273 hectares planted in maize yielded 1761.74 quintals or an average of 6.45 quintals a biolca or 21 quintals a hectare. It is noted that the scarce production of grain in 1917 depended entirely on the unfavourable season. It surpassed the normal average

Milk was, on the other hand, produced abundantly, the yield being 1483.75 quintals in 1917 and 2266.54 quintals in 1918.

The most notable yield was that of forage crops.

If the value of the quantity of forage sold and of the quantity existing when the balance-sheet was closed be added to the value of the milk and of the gross profits on live stock, which consumed the greater part of the forage, we obtain the following figures:

Year	Milk — liras		Forage — liras		Profits on live stock — liras		Total — liras
1917	39,939.33	+	46,380.56	+	109,614.67	=	195,934.56
1918	99,354.87	+	103,144.17	+	259,528.13	=	462,027.17

Thus from the live stock inventoried in 1918 as worth altogether 945,178.37 liras, the valuation being far below the requisitioning price, gross profits of 358,883 liras, including the value of the milk, were obtained.

The greatest item of expenditure was labour which in 1917 cost 185,291.39 liras, that is an average of 166 liras a biolca, and in 1918 cost 565,035.92 liras or an average of 254.86 liras a biolca. In this connection the report we have already cited states that it would be well if members, instead of insisting on over high wages, aimed at raising their society's capital to its maximum, thus consolidating and extending the co-operative movement : " the collective leaseholding societies should prepare for the industrialization of agriculture, and for this it is necessary to attend above all to milk production and the cultivation of crops having an industrial character, like tomatoes, beetroot, etc., in order that afterwards the societies may be able, with the support of co-operative consumers' and labourers' societies, to instal, in the general interest of consumers. the proper cheesemaking and other factories ". In other words the societies

should become the natural suppliers of co-operative selling, and should therefore also attend to viticulture, horticulture and the cultivation of secondary crops.

As we have already said, these societies united in a provincial federation which constituted itself in legal form on 19 December 1917 in order to give to the movement a homogeneous direction and the maximum development. To reach this end the federation adopted the course of promoting the formation of new co-operative societies, ensuring to the federated societies an ample basis of credit, supervising and directing them as regarded their administration and their book-keeping, and pushing them to undertake the industries connected with agriculture by installing cheese factories, wine-cellars, other factories and warehouses, and to undertake all other enterprise advisable in view of the increase of the farms and the conditions of the market.

The first act of the federation, which became active on 1 May 1918, was to join the Trading Agency of Agricultural Co-operative Societies, which had arisen in Bologna and aimed at supplying its member co-operative societies with machines, implements, manures and other articles of good quality as cheaply as possible. It subsequently joined the National Federation of Agricultural Co-operative Societies which has recently become active.

The provincial federation is financed by the contributions of communes, commissions on purchases and the federal subscriptions. Particularly noteworthy are the contributions of the communes of San Lazzaro, Roccabianca, Soragna and Sissa. Total purchases and sales in 1918 amounted to more than a million liras. Purchases made on behalf of the federated co-operative societies (tractors, seeds, lubricating oil, petrol, etc.) amounted to 203,092.55 liras.

The financial position of the federation improves constantly, so that it will soon be able to discharge a far more effective task than that it has hitherto undertaken. It counts on numerous forces which can give the maximum contribution of energy to the development of agricultural co-operation, which in Parma, as our data show, is rapidly organizing and strengthening itself.

§ 2. Collective leaseholding societies in the province of Bologna.

The effort to ensure to the agricultural labourers' associations the direct management of farms on lands belong to corporations, and particularly to religious foundations, meets in this province with satisfactory results, thanks to the work done for this object by the Provincial Consortium of Agricultural Co-operative Societies of Bologna. This consortium was founded in 1911, when it comprised nine societies, and it promoted, between 1915 and 1918, the conclusion of leases of 71 farms, having

a total area of 5,673 tornature (1) and paying a total annual rent of 227,822 liras.

In the case of 14 farms the leases were from 1 November 1915, in that of 26 farms from 1 November 1916, in that of 10 farms from 1 November 1917 and in that of 21 farms from 1 November 1918.

In the course of this work the consortium had to overcome difficulties of various kinds and strong prejudices, especially at the beginning of the movement, and to withstand the competition of individual leaseholders.

As a result of the leases concluded, the number of the co-operative societies belonging to the consortium rose from 9 in 1911 to 17 at the end of 1918. We reproduce, regarding them, the data in Table VII which refer to 31 December 1918.

On 31 December 1918 the consortium and its 17 member societies farmed altogether 9,000 tornature or 1,870 hectares. Besides providing credit for its members' insurance, the consortium was also active in the field of collective purchase, buying material useful to agriculture, and its purchases of this kind included in 1918 more than 400,000 liras' worth of goods and machinery. It has an office in which books are kept for societies who do not command the necessary means for doing this for themselves.

It is anticipated that the number of adherent societies will this year reach 30, thir membership being about 10,000. There is indeed no district or commune, especially in the lower part of the province, in which agricultural co-operative societies do not arise side by side with the labourers' leagues. In the commune of Budrio, where there were already three co-operative societies enrolled in the consortium, other five have been formed, namely at Bagnarola one of *coloni* and tenants and another of labourers, at Mezzolara one of *coloni* and tenants, at Vedrana one of labourers and at Budrio one of labourers. Both at Castel d'Argile and at Castenaso a co-operative society has been formed which is open to agricultural labourers of every category. At Castelmaggiore, where there was already a labourers' co-operative society, another of *coloni* and tenants has been formed. A labourers' co-operative agricultural society has arisen at Granarola, a similar *métayers'* and tenants' society at Bentivoglio.

Other agricultural co-operative societies are in course of formation at Castello di Serravalle, Crevalcore and Borgo Panigale.

In 1921 the leases will fallin, in eighteen communes, of land of the principal religious foundations covering an area of about 7000 tornature or nearly 2000 hectares. The consortium is now preparing to apply for this land, which is now largely farmed by business men, on behalf of its members societies.

(1) The Bolognese *tornatura* is equal to 2080 square metres, and 5673 tornature therefore correspond to 1,179.9840 hectares. See *La Cooperazione Agricola*, Bologna, No. 20-21, 15 November 1918.

TABLE VII. — *Collective Leaseholding*

Name	Situation	Date of formation	1st year of business	No. of members					Capital subscribed		
				labourers	métayers	small leaseholders	small landowners	Total	No. of shares	Amount of a share (liras)	Amount liras
Consortium of Provincial Agric. Co-op. Societies.	Bologna	29 Ap. 1911	1912	—	—	—	—	Societies 17	11,642	1	11,642
Agric. and Labour Co-op. Society	Anzola Em.	20 Feb. 1910	—	207	—	—	—	Persons 207	207	35	7,245
Produc. and Labour Co-op. Society	S. Venanzio G.	24 Nov. 1906	1907	381	—	—	—	381	1,124	10	11,240
Agr. Co-op. Society . . .	S. Pietro C.	18 Nov. 1906	1907	690	—	—	—	690	690	5	3,450
Budrio Co-op. Society. .	Maddal. di C.	30 Jan. 1915	1916	—	7	24	—	31	31	100	3,100
Agric. Co-op. Society . .	S. Agata Bol.	5 Jan. 1915	1916	—	—	21	1	11	11	100	1,100
Agric. Co-op. Society . .	Calcara	15 Nov. 1914	1917	25	19	16	—	60	130	20	2,600
Agric. Co-op. Society . .	Minerbio	20 Dec. 1914	1917	57	—	14	—	72	363	10	3,630
Agric. Co-op. Society . .	S. Giorgio di P.	29 Nov. 1914	1917	—	7	8	—	15	15	100	1,500
Agric. Co-op. Society ..	Baricella	19 March 1916	1917	33	0	6	—	41	73	10	730
Agric. Co-op. Society . .	Medicina	25 March 1906	1907	800	—	—	—	800	3,230	10	32,300
Agric. Co-op. Society . .	Altedo	18 Feb. 1906	1906	734	—	—	—	734	1,468	10	14,680
Agric. Co-op. Society . .	Piumazzo	15 Aug. 1916	1918	1	3	9	—	13	61	30	1,830
Agric. Co-op. Society . .	Bologna	2 Oct. 1916	1918	56	—	—	—	56	56	20	1,120
Totals . . .				2,984	38	88	1	3,111			96,167

§ 3. COLLECTIVE LEASEHOLDING SOCIETIES IN THE PROVINCE OF FERRARA.

If the agricultural co-operative movement in the province of Ferrara has not yet attained to a development equal to the importance of this province, it has yet entered on a course which gives good hopes for its future (1). The first efforts of agricultural co-operation which met with success, in virtue of the spirit of discipline of the labouring class or the technical capacity of the leaders, go back to 1905 and were made in the commune of Bondeno.

Three co-operative societies were constituted, namely the Bondeno production and labour society; the Pilastri (Bondeno) Co-operative Union of Production, Labour and Consumption; and the "Ever Forward" agricultural co-operative society (*Cooperativa Agricola Sempre Avanti*) of Gavello (Bondeno).

(1) See GIUSEPPE BARDELLINI: *La Cooperazione agricola nel Ferrarese* in *Cooperazione e Mutualità agrarie*, Supplement to *I Campi*. Rome, No. 2, March 1919.

Societies in the Province of Bologna.

Paid up capital	Funds			Total capital and funds	Yield		Results last year	Area cultivated (Tornature)			Date of balance-sheet
	Ordinary reserve	Extraordinary reserve	Thrift fund		Year	Value in		Farmed collectively	Farmed by households	Total	
liras	liras	liras	liras	liras		liras	liras				
8,680	38.86	—	—	11,630.36	1918	7,713	495.81	103	—	103	31-12-1918
5,319	2,088.67	—	2,159.23	11,492.90	1918	111,481	1,102.12	456	445	901	31-12-1918
10,958	22,356.80	—	—	33,596.80	1918	152,630	2,493.02	350	—	350	31-12-1919
3.450	1,844.85	—	28,471.41	33,776.26	1918	361,044	12,941.56	811	—	811	31-12-1918
2,650	1,168.75	1,168.75	—	5,437.60	1918	9,626	1,563.77	73	520	593	31-12-1918
960	895.42	—	—	1.995 42	—	—	477.19	—	1,236	1,236	31-10-1918
2,254	61 —	—	8,382.10	12,661 —	1918	9,953	754.59	82	240	922	31-10-1918
2,366	20.60	—	—	3,650.60	1918	—	6.37	—	226	226	31-10-1918
1,400	439.74	—	—	1,939.74	1918	11,439	1,184.76	90	65	155	31-10-1918
604	137.68	—	—	867.68	—	107,246	3,436.31	963	271	1,434	31-10-1918
20,560	5,420.92	—	—	37,720.92	1918	400,000	15,183.40	1,000	—	1,000	31-12-1918
11,389	5,300.26	—	—	19,980.26	1918	276,374	1,710.19	602	131	733	31-12-1918
1,530	—	—	—	1,830 —	—	59,641	2,527.01	273	65	338	31-12-1918
493	112 —	—	—	1,232 —	1918	17,319	332.85	30	—	30	31-10-1918
72,313	39,885.53	1,168.75	30,630.64	167,851.94		1,524,996	44,209.55	4,833	3,799	8,632	

The first of these, which is the oldest and arose in 1905, manages four holdings having an area of 196 hectares for which it pays to the landowner, the Bondeno Hospital, a rent of 50,891 liras, and whence it obtains an annual gross yield of 50,000 liras. Its membership is 1384.

The Pilastre Co-operative Union of Production, Labour and Consumption, formed in 1908, has three holdings having a total area of 99.57 hectares for which it pays a rent of 21,500 liras and whence it draws a gross yield of about 180,000 liras. Its membership is 257.

The "Ever Forward" co-operative society of Gavello arose in 1913, and has two holdings of a total area of 99.47 hectares for which it pays a rent of 20,484 liras and whence it obtains an average gross yield of 195,000 liras. It has 92 members.

When the figures regarding these societies are examined it appears that they have within a few years reached a considerable development, important moreover because of agricultural innovations introduced and new depatures taken. In 1915 they won a prize from the Ministry of Agriculture in a competition for wheat for sowing and also from the Ferrarese Itinerant Lectureship on Agriculture in a calf breeding competition.

The treatment of hemp, the threshing of wheat and drainage are accomplished by machinery belonging to the societies, who also use a motor tractor for ploughing.

Last year these societies attained to the excellent result of producing 260 quintals of a kind of sowing wheat renowned for its yield and its resistance to blights.

These results appear the more remarkable when it is remembered that societies of this kind are constituted by cultivators who hold no land, and whose boldness, perseverance and modern and liberal views have brought them to prosperity.

§ 4. Collective leaseholding societies in Lombardy.

It has been seen that the collective leaseholding societies in Emilia and Romagna arose out of the necessity of finding a remedy for the unemployment unmitigated by emigration, and that they hold farms of which the management is collective and the labour is supplied by the members in turn, the latter always being more numerous than the farms require. But in Upper Lombardy, as in Sicily, they originated in the necessity for eliminating the speculating middleman or *fittabile*, whose influence on rents was frequently deplored. The *fittabili* conform to two types (1) : in Lower Lombardy a *fittabile* takes on lease for a term of from 9 to 12 years extensive properties which he manages and farms on his own account, according to the principles of large-scale farming, availing himself of the labour of the peasants established on the land, who are paid partly in kind and partly in cash, and also, on occasion, of casual labour.

The *fittabile* of Upper Lombardy, on the other hand, while he rents large areas does not introduce farming on a large scale. He divides his leasehold into lots which he cedes to so many *coloni*, as rent-paying tenants or *métayers*, and these *coloni* are independent among themselves although subject to his supervision.

While much of the reputation of agricultural Lombardy is owed to the various forms of the activity of *fittabili* of these two kinds, the fact cannot be overlooked that they have in some cases been guilty of abuses. The large capitalist leaseholder who cannot escape from the necessity of paying to his landowner a considerable rent, raised by competition at every renewal of the lease, and of investing the large capital which long leases and enterprising and reformed agriculture demand, is often influenced to reduce the price of labour to the minimum, taking advantage of the competition of the labouring classes on the labour market, and, in the case of peasants bound to the soil, exacting from them maximum returns for a very scanty recompense accompanied by the obligation to render very burdensome services.

The relations between employer and employed being thus disturbed and the balance between the two factors of prduction destroyed, the

(1) G. Moltfni: *Gli affitti collettivi e la loro importanza sociale*, Milan, 1901.

coloniale system of cultivation entered on a crisis which, particularly in the Upper Milanese district, culminated in two phases, a violent phase constituted by the agrarian agitation of 1901-2, and a peaceful but more serious phase manifested in the abandonment of the soil.

On the other hand, the neighbourhood of Milan, and the comparison a peasant is drawn to make between the conditions of his own life and of that of industrial workers, caused the disappearance of the *colono* of the old type, changing him into a modern labourer who wishes to obtain the maximum payment for his labour together with the fullest independence and the most scrupulous equality between his duties and rights and those of his employer.

To obtain these results it was however necessary that the labourer should again come into more direct contact with the landowner, from whom the intervention of the speculating middleman had separated him, and that, holding his land from the owner directly, he should retain for himself that supplement of rent which had gone to the profit of the man who had let him his holding. This was an aim that it seemed easier for a body of organized peasants than for a single labourer to reach. Such body, taking the place of the *fittabile*, could take the land over from the owner directly, paying a rent and itself retaining the entire profits.

In this way the collective leaseholding societies arose in Lombardy. They began in 1886 with the experiment of Stagno Lombardo (Cremona), followed in 1887 by the Agricultural Co-operative Society of Calvenzano (Bergamo) and in 1897 by the Catholic Rural Bank of Ca'de Soresini (Cremona). After 1902, a time in which various strikes gave definiteness to the peasants' wish to emancipate themselves from the middleman *fittabile*, these societies spread.

Catholic leaseholding societies and unaconfessional leaseholding societies tending to be socialistic or neutral are to be distinguished from each other.

The Catholic leaseholding societies, which are the most numerous, aim at concluding the most economic and social form of lease, the direct lease of a small holding, "as being that which, strengthened by landlordship, ensures the collaboration of classes, and can restore the conception and function of Christianity to property" (1). Societies of this kind are in most cases constituted in the form of civil societies having unlimited liability. Other leaseholding societies take the form of co-operative societies, collective in name.

The civil societies, on the model of the society of the *Probi Contadini* of Castel Cerreto and Battaglie which was formed in Treviglio in 1901, take farms on lease for nine or more rarely for twelve years, in order to farm them directly, using scientific and modern agricultural methods.

Rents vary with area and productivity, and often include the price

(1) AMBROGIO PORTALUPPI: *L'affitto collettivo. Concetto e norme pratiche.* Treviglio, Messagi, 1911.

of the dwellings of the *coloni*, which in other cases are separately rented by the peasants.

The landowner also generally exacts, as a security for the payment of the annual rent, a cautionary deposit which varies, in accordance with the society's financial position and therefore of the credit it enjoys, from half to double the sum of a year's rent.

Side by side with the Catholic leaseholding societies there flourish the socialistic or neutral peasants' societies whose origin dates back to the movement of resistance which defined itself among the Lombard peasants with the risings of 1901. Among these societies the Agricultural Co-operative Society of Calvenzano, already mentioned, is particularly interesting, and boasts of a long existence and of a very remarkable organization and prosperity.

We will briefly sketch its organization. It was legally constituted in 1887, for a term of 50 years which can be prolonged by a resolution of its members' meeting, and it has the form of a co-operative, joint-stock company. Its aims are the development of the agricultural industry and the welfare of its members, to be attained by co-operation.

Since it makes no special political profession, any labourer can be a member, whether man or woman, if he be eighteen years old, if his application for membership have been accepted by the managing committee, and if he have subscribed for at least one share (to be paid up within a period of five years) and have paid the entrance fee which may not exceed 50 liras. It is superfluous to state that such conditions give an extraordinary stimulus to the entrance even of the poorest peasants into the society.

The status of member is lost, his shares lapsing, when a man for justifiable causes resigns fro the society or when he is excluded from it for reasons involving dishonour or prejudice to the interests of the society (such as his unauthorized practising on his own account of one of the forms of the society's industrial activity). There is appeal to the arbitration board from a sentence of expulsion pronounced by the managing committee.

Every member has the right to a part in the employment and profits which the society provides. He has one vote in the society whatever be the number (not more than 50) of his shares.

The society's capital is furnished by the 50 lira shares, the reserve funds, the entrance fees, its chattels and real estate, the profits on its enterprise, and any other sources of income.

From its origin the society has had a lien on the shares as security for the members' obligations to itself.

The members' general meeting holds its ordinary session in the first quarter of every year in order to discuss and approve its balance-sheet, appoint substitutes for members of the managing committee ceasing to hold office, and nominate auditors and arbitrators.

The managing committee manages the society and represents it to outsiders. All labourer members may belong to it and none but they may

be elected to it. It consists of a chairman, vice-chairman and five other members who hold office for two years and are eligible for re-election. The auditors are specially charged to supervise the society's business and verify its balance-sheets, books, papers, etc. The arbitrators finally decide all disputes with regard to the admission, lapse of membership or exclusion of members, and also, on request, questions regarding the society's business which arise among members and between members and the management.

Finally, the provisions in the constitution of this society which regard to the reserve fund and the distribution of profits are of particular interest. The rules show the greatest care for the formation of a reserve fund between which and the society's capital a constant relation is to be maintained. An annual deduction of 10 per cent. from net profits, the entrance fees and transferred shares, dividends unrecovered for five years and other sums which may accrue go to make up this fund.

The deduction of ten per cent. from profits ceases when the reserve has become equal to half the society's capital but is again made if it happens that the reserve diminishes. Ten per cent. thus devolving on the reserve, the remaining net profits are distributed: 60 per cent. among the members, in proportion to the value of the goods they have contributed, the rents they have paid or their special loans, and among the persons employed for salaries or wages on the society's land, in proportion to the services they have rendered; 20 per cent. to shareholders so long as no more than a sum equal to 5 per cent. of the paid-up capital is thus paid on shares; 5 per cent. to the education fund; and 5 per cent. to the relief fund.

The dividend on shares is calculated on the payments already made at the beginning of each financial year.

Having made these notes on the origin and organization of Lombard collective leaseholding societies, we reproduce in Table VIII data, referring to 31 December 1918, as to thirty-five societies of this kind in the province of Bergamo which form the most numerous and important group.

These 35 collective leaseholding societies all belong to the Provincial Federation of Collective Leaseholding Societies which arose in Bergamo in April 1918 on the initiative of a deserving institution, the Institute of Social Assistance which groups societies of all opinions and creeds, and carries out on their behalf an intensive work of propaganda and technical assistance.

In the watered zone of Lombardy the movement prospers in spite of economic and technical difficulties (1). In the province of Milan cooperative leaseholding societies have been constituted at Pioltello, Vimodrone, Melzo, Paullo and Lodi; in the province of Cremona the societies of Cremona and Due Miglia, of Sesto Cremonese and Paderno, of Sospiro, of Cingia de' Botti, etc. have been added to the societies of San Giovanni

(1) *Bollettino dell'Agricoltura*, Milan, No. 16. 9 May 1919.

TABLE VIII. — *Collective heascholding Societies in the Province of Bergamo.*

Order no.	Society	Situation	Form of Society	Membership	Annual rent liras	Area of farms in Bergamesque perches (1).	Year of formation	Length of lease, years
1	Società agricola	Fara Olivana . . .	civil	88	47,000	5,700	1911	9
2	Società agricola « Albertina » . . .	Boccaleone (Berg.) .	do.	16	20,388	1,354	1911	9
3	Società cooperativa agricola	Calvenzano	trading	144	20,490	2,815	1887	12
4	Società agricola « S. Vittore » . . .	Bottanuco	civil	6	4,500	280	1912	12
5	Società agricola d'affitto collettivo .	Ciserano	do.	110	32,400	2,809	1910	9
6	Società agricola di Lallio	Grumello del P. . .	do.	10	7,850	534	1915	9
7	Società civile particolare « La Grumellina »	Grumello del P. . .	do.	13	13,400	898	1914	9
8	Società dei probi contadini	Bonata sopra . . .	do.	12	6,500	480	1909	9
9	Cassa rurale (ex Unione rurale) . . .	Calvenzano	trading	187	7,762	477	1913	9
10	Società dei probi contadini « del Polaresco »	Bergame	civil	10	8,150	542	1914	11
11	Società agricola « S. Lorenzo » . . .	Bonate sopra . . .	do.	13	13,680	715	1912	9
12	Società agricola	S. Paolo d'Argon . .	do.	80	44,000	6,485	1911	12
13	Società colonica « Possessione Moscona »	Romano	by contract	6	6,800	436	1909	9
14	Società colonica « Possessione Monache »	Romano	do.	6	7,800	500	1009	9
15	Società colonica « Possessione Gasparina »	Romano	do.	13	10,116	800	1911	12
16	Società agricola « La Romana » . . .	Spirano	civil	5	9,500	840	1912	9
17	Società agricola « La Fittanzina » .	Arace	do.	18	5,460	500	1905	12
18	Società agricola « La Misericordia »	Spirano	do.	154	36,100	4,000	1906	12
19	Società agricola d'affitto collettivo .	Sola (Fara Oliv.) .	do.	47	21,000	2,000	1909	12
20	Società agricola dei probi contadini di Castel Cerreto e Battaglie . .	Treviglio	do.	154	67,000	8,040	1901	12
21	Società agricola « La sottocosta » .	Treviglio	do.	8	6,350	650	1911	9
22	Società agricola di probi contadini .	Conumnovo	do.	40	44,356	3,800	1911	9
23	Società agricola.	Lurano	do.	25	24,000	2,186	1909	9
24	Cassa rurale d'affitto collettivo . .	Verdello	trading	16	10,000	720	1912	9
25	Società agricola	Malpaga (Cavernago)	civil	37	80,696	6,000	1912	9
26	Società agricola di Cortenova di Sop.	Martinengo	do.	17	15,500	1,545	1909	9
27	Cassa rurale con affitto collettivo .	Caravaggio	trading	130	57,520	5,786	1903	12
28	Società agricola	Redona	civil	9	3,400	240	1914	9
29	Società agricola	Sabbio Bergam. . .	do.	7	8,930	434	1917	9
30	Società anonima cooperativa tra lavoratori della terra	Caravaggio	trading	222	20,727	1,502	1906	12
31	Società agricola di Caleppio	Pontirolo Nuovo . .	civil	17	6171	705	1908	9
32	Società civile particolare dei contadini della Valletta, Sabbio, Sforzatica, Stezzano e Lallio	Bergame	do.	25	16,000	1,054	1903	9
33	Cassa rurale con affitto collettivo .	Calcio	trading	235	13,600	960	1903	
	Totals			1880	697,146	65,787		
	Leaseholds of Alpine Shepherds;							
34	Società per l'alpeggio	Castione d. Prea. . .	by contract	32	3,098	89	1903	5
35	Società per l'alpeggio	Fino del Monte . . .	civil	22	1,700	100	1907	9
	General totals . . .			1934	701,944	—		

(1) The Bergamesque perch is, like the Milanese perch, equal to 654 square metres, and there are about 15 of them in a hectare.

in Croce, Pieve San Giacomo and Motta Baluffi which were already at work.

In the province of Pavia also the network of co-operative societies destined to become collective leaseholders is being completed: in Lomellina, to the north of Ticino, the co-operative societies are ready to begin their activities.

For the collective leaseholding societies in the province of Mantua we refer the reader to the article in our issue for August 1918.

SWITZERLAND.

CO-OPERATIVE AGRICULTURAL CREDIT.

SOURCES:

XVe RAPPORT ANNUEL DE L'UNION SUISSE DES CAISSES DE CRÉDIT RAIFFEISEN (*Fifth Annual Report of the Swiss Union of Raiffeisen Credit Banks*). — Lausanne, A. Bovard-Guidetti, 1918.

STATUTS DE LA CAISSE RAIFFEISEN; DE STATUTS NORMAUX ADOPTÉS PAR L'UNION SUISSE DES CAISSES DE CRÉDIT RAIFFEISEN (*Rules of the Raiffeisen Bank of Châtel-St-Denis; Model rules adopted by the Swiss Union of Raiffeisen Credit Banks*). — Châtel-St-Denis, W. J. Hüssler, 1918.

STATUTS DE L'UNION SUISSE DES CAISSES RAIFFEISEN. — Lausanne, L. Vincent, 1909.

In Switzerland, as in most other countries, agricultural credit business is conducted in the co-operative form. For this purpose single rural banks were founded on the well known principles of F. W. Raiffeisen, and they gradually spread to all the cantons and enlarged their sphere until they felt the need to group themselves in a special union which would co-ordinate and give an impulse to their work.

The stage of development to which the Swiss rural banks have today attained is essentially due to the beneficent activity of a union of this kind. We will therefore pause to consider its organization before we describe the results it obtained down to 1917 in connection with the work accomplished by the banks it federates.

§ 1. THE RURAL BANKS.

A. *Organization.*

The development of co-operative credit in Switzerland dates from 1900, when the first rural bank was founded in Bichelse (Thurgovia). This example was soon followed in all the Swiss cantons. The Swiss rural banks are of the pure Raiffeisen type, having mutual and unlimited liability. They are entered in the trade register, discharge the duties of

savings and credit banks, and are regulated by Articles 678 to 715 of the federal code on obligations.

A banking society may trade in primary materials, agricultural produce and articles of consumption required by industry and agriculture, within the limits of the capital it commands.

Members pay into the bank, when admitted to membership, an entrance fee which becomes the property of the association, and also the amount of a share which entitles them to participation in the bank's affairs.

The agents of the association are its managing committee, its cashier, its board of directors and its general meeting.

The chairman of the managing committee and the chairman of the board of directors are elected by the general meeting. The members of these two bodies are honorary, unpaid officials, holding office for four years.

Financial management. — The capital at the society's disposal for its business is formed of the society's capital, entrance fees, the reserve fund, and capital deposited in the bank (member's shares, loans, savings deposits). The reserve fund is made up of 50 per cent. deducted from annual profits as a first charge. From the remaining 50 per cent. the general meeting deducts the sum necessary for payment of interest on members' shares, at a rate not exceeding that at which the bank pays interest on loans. The residue goes to the reserve fund.

When the reserve fund becomes equal in amount to the capital formed by the members' shares, the annual net profits, after deduction of interest on the shares, is assigned by the general meeting to agricultural and industrial enterprise advantageous to the whole body of the members.

In all cases the reserve fund remains the property of the society. The members have no individual right to it and cannot demand its division among themselves.

The Raiffeisen banks belong to the Swiss Union of Raiffeisen Banks and must undergo periodic inspection on the part of an inspector of that body.

In case of dissolution, the funds are transmitted to the Union or to some other safe institution, and there remain at interest until a new society, based on identical principles and imposing by its rules the same conditions of admission as the Swiss Union (Article 4 of the central rules), is constituted in the same district.

B. *Activity.*

We will here give in a comparative table (Table I) the principal data as to the development of Raiffeisen Banks in Switzerland from 1903 until the end of 1917.

Generally speaking, it may be stated that the Swiss rural banks show for 1917, as compared with previous years, very promising results. The total balance of all the banks passed from 37,909,412 francs in 1916 to

TABLE I. — *Development of the Swiss Raiffeisen Banks* 1903-1917.

Year	No. of banks	Membership	Total receipts and expenditure francs	Balance sheet total francs	No. of depositors of savings	Savings deposits francs	Reserves francs
1903	27	1,740	6,037,707	1,765,817	2,323	526,953	10,581
1904 . . .	38	2,455	9,896,497	3,415,186	3,878	1,368,260	10,053
1905	49	3,292	13,697,274	5,297,844	5,633	2,246,882	41,239
1906	61	4,905	15,678,817	6,922,303	8,192	3,071,059	69,658
1907	74	5,533	22,619,703	9,317,554	10,412	4,296,578	98,305
1908	94	6,637	26,655,990	11,997,061	13,483	5,488,940	137,322
1909	108	7,573	36,552,978	15,668,098	17,816	7,260,667	187,539
1910	139	9,402	46,173,886	19,941,819	22,337	9,239,938	244,442
1911	154	10,021	52,408,041	22,827,873	24,413	10,428,555	301,385
1912 . .	159	10,739	57,023,987	25,535,248	27,214	11,574,870	390,293
1913 . . .	166	11,507	50,220,170	27,444,310	29,549	12,832,339	474,880
1914 . . .	178	12,363	47,254,453	29,747,239	30,901	13,918,638	561,643
1915 . . .	183	13,029	54,246 375	32,112,506	33,627	15,298,354	661,519
1916	195	13,867	83,981,027	37,909,412	37,817	17,780,139	779,175
1917	208	14,904	115,486,946	46,552,374	41,739	21,434,105	927,718

46,552,374 francs in 1917, thus increasing by about 25 per cent. The total incomings and outgoings showed proportionately an even greater increase between these two years, namely one of about 38 per cent. which brought their sum up to 145,486,946 francs. This figure can naturally not be compared with that to which the large banks attained. But it should not be forgotten that the rural banks' sphere of activity is strictly limited to their men bers and that these do not include persons occupied by industry on a large scale or by high finance but are drawn from the lower classes of the rural population.

The increase of savings deposits caused these to exceed by 4 million francs their sum in the previous year, bringing them up to the respectable figure of 21,500,000 francs. The depositors numbered 37,817 in 1916 and 41,439 in 1917, savings bank books increasing by 3,622.

The societies' capital (the amount of the shares) passed from 808,000 francs to 920,000 francs.

The reserves amounted on 31 December 1917 to 920,000 francs, having increased by 148,000 francs.

The societies' capital and the reserves rose to 1,847,000 francs ; the bonds and the term deposits increased by 24,555 francs and amounted to the total sum of 13,305,000 francs.

Deposits on current account increased considerably, so that 6,825

credit accounts were for the total sum of 9,739,000 francs, thus averaging 1425 francs per depositor.

On the credit side of the balance-sheet the item "loans" (mortgage and credit bonds) is represented by a total sum of 30,430,000 francs (as against 25,950,000 francs in 1916) for 13,506 loans (12,736 in 1916), the average sum of a loan being 2,253 francs (2,004 in 1916).

On 31 December 1917, 2944 current liability accounts had been opened, and the total sum owed under this head by members to the banks was 14,349,000 francs, as against 2742 current liability accounts and 10,469,000 francs in 1916. The importance of these figures is evident, but the department of current credit and liability accounts might still be much developed.

Finally, we think it interesting to notice the development of Swiss rural mutual credit in the individual cantons, and the following table gives the data on this subject, shewing the Swiss Raiffeisen banks grouped by cantons.

TABLE II. — *Statistics of Swiss Raiffeisen Banks, grouped by cantons.*

Cantons	No. of banks	Membership	No. of depositors	Total receipts and expenditure francs	Balance sheet total francs	Reserves francs
Argovia	14	1,137	2,536	5,280,588	2,578,584	36,375
Appenzell R. E. .	3	108	123	99,609	69,138	2,916
Basle country . .	6	726	1,860	3,356,630	1,393,942	54,702
Berne	1	44	26	70,068	44,234	223
Fribourg. . .	32	1,953	5,681	11,152,236	5,248,154	144,461
Grisons	3	117	216	349,582	150,398	1,147
Lucerne	4	314	916	1,739,280	1,175,791	37,889
Nidwald	2	70	304	520,896	169,539	4,645
Schaffhouse . . .	1	102	366	454,732	249,414	2,036
Schwiz	6	681	1,972	4,175,457	1,454,331	36,569
Soleure	40	2,711	7,969	11,459,566	8,020,987	136,820
Saint Gall . . .	46	4,132	13,963	46,903,313	17,798,949	330,214
Thurgovia	8	753	2,270	9,721,776	3,924,189	66,207
Uri	1	82	137	163,105	141,377	4,326
Vaud	22	1,135	1,914	17,233,883	3,050,476	40,621
Valais	17	777	1,065	2,228,350	984,666	27,430
Zurich.	2	62	121	277,665	100,198	1,129
Totals . .	208	14,904	41,439	115,486,946	46,552,374	927,718

§ 2. The Swiss Union of Raiffeisen Banks.

A. *Organization.*

On 12 June 1902 the Swiss Rural Banks, taking for basis Article 678 and the following articles of the Federal Code as to obligations, founded for an undetermined period of time a limited liability association having the following programme :— (*a*) the foundation and development on the Raiffeisen system of lending banks and co-operative societies of public utility ; (*b*) the giving of advice and information to members of the Union as to their business, and (*c*) the defence of their interests of all kinds, particularly in connection with public authorities and legislative organs. It belongs to the Union (*a*) to see that the federated banks accurately fulfil the duty of keeping their books on a uniform system, such books being periodically inspected by auditors appointed *ad hoc* ; (*b*) to institute a Central Bank managed on commercial lines and intended to establish a balance between the need for money and the available resources of the federated banks ; (*c*) to purchase and sell collectively agricultural or manufactured products.

The Union's foundation capital is made up of the partnership-conferring shares of the affiliated societies. These shares are completely secured by the valid debts which the Union contracts, as is the remainder of the capital. Such security holds good for two years after the status of membership has been lost. Members are obliged to take one partnership-conferring share of 1000 francs for every hundred or fraction of a hundred members, and to pay the amount into the central fund by annual instalments of 200 francs.

As regards admission to the Union, the general principle holds good that only mutual credit associations, whose rules do not transgress any of the essential rules laid down by the Union's model rules, may belong to it.

The federated societies have the right of depositing their available capital in the Union's bank, of contracting loans with this bank, of participating in the trade in goods, of obtaining advice and information as to their business from the Union's committee, and of delegating one representative, having one vote, for every hundred or fraction of a hundred members they include, that is to say of having as many representatives as they have partnership-conferring shares.

The Swiss Union of Raiffeisen Banks has the following administrative agents : the committee, the board of directors, the cashier, the auditors, the delegates' meeting. The committee and the board of directors are elected by secret ballot by the delegates' meeting ; the cashier and the auditors are appointed by the committee.

Central Bank.—We have already stated that one of the Union's chief duties is the institution of a Central Bank intended to maintain a balance between the federated banks' need for money and their available resources. The bank in question is managed by the Union's cashier, supervised by

the union's administrative agents, and in the first place by the committee. The cashier, his clerks and the auditors are officials of the Union, freely appointed by its committee.

The capital necessary to the working of the Central Bank is made up: (1) of the partnership-conferring shares; (2) of profits realized on goods; (3) of the deposits of the federated banks; (4) by the Union's savings-bank; (5) by the issue of bonds and current credit accounts; and (6) by the constitution of mortgages on the sale of chattels or real estate.

The Central Bank grants loans only to the federated societies and in proportion to their credit, after an investigation by the committee.

Superfluous funds are deposited in very safe financial institutions, or are invested in safe securities, or assigned to the purchase of real estate.

No dividends are paid. The partnership-conferring shares bear interest at a rate fixed by the general meeting in accordance with the results obtained in the previous year, such rate in no case exceeding 5 per cent.

Net profits are paid into the reserve fund until its amount is equal to ten times that of the partnership-conferring shares, and are afterwards invested at interest by the Union or its sections in accordance with the resolutions of the General Meeting.

We should notice finally that the formation within the Swiss Union of Raiffeisen Banks of *sectional groups*, extending over one or more cantons, has been authorized. These groups may have the same aims as the Union, but may not institute a central bank and their rules may not in any particular conflict with those of the Union. Societies which do not belong to the Union may be admitted to these groups.

In case of dissolution, the association's capital is, after liquidation, invested at interest and its real estate is sold. This property becomes that of a new union which must be constituted by a majority of the federated societies or by the representatives of these at the time of dissolution. If such a new union has not been constituted within three years of the dissolution, the aforesaid societies or their representatives will dispose of the association's capital as the majority of their votes decide, but may not share it among themselves.

B. *Activity.*

Central Bank. — The following table (Table III) reproduces the principal comparative data as to the development of the Swiss Central Bank of the Raiffeisen Banks in the period from 1902 to 1917, inclusive.

As we have already stated in speaking of the rural banks, the Swiss Union of Raiffeisen Banks in 1917 admitted a certain number of new banks, namely twelve in French and four in German Switzerland.

The year 1917 was prosperous for the Central Bank of the Swiss Union. Its credit balance passed from 5,200,000 francs to 8,100,000 francs, its total incomings and outgoings from 37,000,000 francs to 82,000,000 francs. Its profit and loss account closed showing a profit of 22,380 francs, of which 15,120 francs were absorbed by the interest

TABLE III. — *Development of Central Bank of Swiss Union of Raiffeisen Banks* 1902-1917.

Year	Total receipts and expenditure francs	Balance sheet total francs	Share capital francs	Reserves francs
1903	1,636,241	240,516	2,400	221
1904	2,474,425	492,473	8,500	974
1905	3,831,262	608,788	17,100	1,297
1906	4,135,959	577,851	31,550	382
1907	5,377,458	897,757	45,450	927
1908	6,331,216	1,097,714	60,700	2,011
1909	8,723,883	1,179,212	75,550	3,622
1910	11,579,994	1,474,219	99,800	7,051
1911	16,862,442	1,891,363	109,800	10,039
1912	18,821,034	1,753,854	135,600	10,140
1913	9,663,443	1,557,175	248,000	64,704
1914	19,856,730	1,82[illegible],163	310,100	20,000
1915	20,316,566	3,045,886	342,400	24,500
1916	37,115,465	5,262,923	74,500	30,000
1917	82,528,267	8,118,179	383,000	37,000

of 4 per cent. payable by the rules on the partnership-conferring shares, while 7,000 francs were paid into the reserve fund.

The paid-up capital amounts to 383,000 francs. The banks are however, by the rules, still engaged for a sum of 174,000 francs. The guarantee capital, including the reserves, thus represents 8 per cent. of the capital entrusted to the bank.

This percentage does not really correspond to that usually insisted upon for banks and it might be considered insufficient. But it should be noticed that 50 per cent. of the credit balance of the Central Bank consists of bonds of the Confederation and the Swiss Cantons and towns, so that great risks can be discounted and that about 25 per cent. of the same balance, being invested in the local banks which are in the debt of the Central Bank, is completely secured by the capital of their members.

The term deposits show an increase of about 1,300,000 francs, and the current accounts of deposits, payable at sight, have risen from 3,000,000 francs to 4,650,000 francs.

In view of the development of the Central Bank, the Union considers that the moment has come for placing this bank's reserves at the disposal of the great agricultural associations of Switzerland. What a local bank can do in its limited sphere with its resources, the Central Bank has the means to effect on a far larger scale and in a vaster field. A certain num-

ber of these great associations have already entered into business relations with the Swiss Union and others will follow their example.

During 1917 the rates of interest were unchanged, namely 4 per cent. on current accounts for deposits payable at sight, 4 ½ per cent. on deposits engaged for from six months to a year, 4 ¾ per cent. on bonds maturing in two years.

Official Organs of the Union. — These are the " Raiffeisen-bote " and the " Messager ". The former's subscribers increased by 100 and in December 1917 the paper was printed in 3300 copies. The " Messager " has more than 800 subscribers.

Inspections. — In 1917, 122 banks were inspected, namely 77 in German Switzerland, 44 in French Switzerland and one in Italian Switzerland.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES

CANADA.

THE CO-OPERATIVE SALE OF WOOL IN 1918. — *The Farmer's Advocate*, London (Ontario), 20 February 1919.

The Canadian Co-operative Wool Growers' Association sold approximately 1 ½ millions of pounds of wool in 1918 and was successful in obtaining top price for practically all of it.

The Association worked on a 3 ½ per cent. basis and out of this was able to meet all the expense entailed, to declare a dividend of 6 per cent., to set aside $20,000 as a reserve fund, to make a rebate of $27,922 to local associations, and still to have a substantial contingent fund. The brokers handling wool usually work on a 5 per cent basis ; thus, even if it had not succeeded in obtaining increased prices for the wool marketed, the Association would have enabled the wool-growers to save a considerable sum of money.

The wool is collected and graded at central points and is then sold on grade by the association. Much of the success attained in marketing the wool was due to the efficient grading at the various centres in the different provinces.

The Manager's Report for 1918 contains an interesting account of market conditions prevailing during the year and of the manner in which the association was able to serve the interests of the wool-growers. Early in the season it was anticipated that the demand of the Canadian manufacturers would be satisfied by the Australian and New Zealand wool issued to them, through the Wool Commission, by the Imperial Government. The prices of Canadian wool were established on the American prices which were higher than the British fixed prices. Hence it was expected that the manufacturers would endeavour to dispense with Canadian wool, and the Association accordingly made every effort to maintain an open export market to the United States. The Government of that country, however, placed an import tax, representing 5 % of the value, against all foreign wools. Added to this, the manufacturers, fearing

a delay in the arrival of the British Government wool, or that it might not prove sufficient for their requirements, made efforts to restrict the exportation of Canadian wool. Their proposals in this respect implied that the prices of Canadian wool should be reduced to correspond with those of the British Government. The manufacturers further suggested that the Government should commandeer the wool and send it to the United States to be combed in bond and returned to Canada for their subsequent use. In April a meeting was held, before the War Trade Board, of the manufacturers and of the representatives of the Wool Growers' Association. The association gained its point and an open market was assured to the growers. The War Trade Board even promised to try to persuade the American Government to remove the restriction upon the importation of Canadian wool. At the same time the Board desired, in fairness to the manufacturers, to give them an opportunity of purchasing it before exportation, by having it offered to them, through the Wool Commission, for a period of fifteen days. They decreed that the option price should be the same as that fixed by the American Government.

Up to about the 10th of June, very few manufacturers wanted Canadian wool at the prices quoted. However, a number of American Government contracts were placed in Canada and there was delay in the arrival of the Australian wool. The Canadian market became very active and remained so for six weeks. During this time the association disposed of about two million pounds of wool. Even subsequent to the arrival of the Australian wool, a little Canadian wool continued to be sold in competition with it. When the market in Canada had permanently subsided, it was decided by the Association that disposal of the remaining wool in the United States was preferable to awaiting a market in Canada later on. In spite of the many difficulties and delays entailed in shipment to America, the Association succeded in marketing a considerable quantity of wool in the Boston market.

The following table shows the amount of wool from each province sold on the Canadian market and in Boston:

Province	Sold in Canada	Sold in Boston
	lbs.	lbs.
Alberta	985,935	1,082,027
British Columbia	35,323	11,359
Manitoba	87,375	278,849
New Brunswick	31,750	—
Nova Scotia	79,095	—
Ontario	747,370	—
Prince Edward Island	53,294	—
Quebec	215,278	—
Saskatchewan	164,248	392,061

In general 1918 was a prosperous year for sheep-raisers in Canada. Exceptionally high prices prevailed, but without organization it is doubtful if these prices could have been realized.

GREAT BRITAIN AND IRELAND

VILLAGE ASSOCIATIONS — *The Journal of the Board of Agriculture*, Vol XXV, No. 7, London, October 1918; *The Nineteenth Century and after*, No. 505, London, March 1919; *The North British Agriculturist*, Vol. LXXI, No 16, Edinburgh, 17 April 1919; *Wages Board Gazette*, Vol. I, No. 17, London, 15 April 1919; *The Journal of the Land Agents' Society*, Vol. XVIII, No. 3, London, March 1919.

The movement towards association in the villages of Great Britain and Ireland originates first in a desire to check the rural exodus by rendering village life more attractive, secondly in a wish to provide knowledge which will make the work of country people more profitable to themselves and the nation and cause them to regulate their lives in accordance with better economic principles. The associations which have hitherto been most successful are the Women's Institute..

A. *The Women's Institutes.* — In 1913 Mrs. Alfred Watt, secretary of the Women's Institutes Advisory Committee to the British Columbia Department of Agriculture, spoke at various meetings in England on the work of the Canadian Women's Institutes; and shortly after the outbreak of war she issued a leaflet showing how the establishment of Women's Institutes in villages might help to increase the food supply. In 1915 she got into touch with the Agricultural Organization Society, which at its meeting of 23 June 1915 resolved to organize Women's Institutes in England and Wales and appointed a small sub-committee to carry out the work. Under the auspices of the society Mrs. Watt visited first North Wales, where the first Women's Institute was constituted at Llanfairpwll in September 1915, then East Dorset where in the following November an institute was founded at Wallisdown. In December 1916 there were 50 Women's Institutes in England and Wales, in October 1917 there were 137 of them. At this time the importance of the work of the institutes in maintaining and increasing the food supply had become so evident that the Board of Agriculture offered, with the approval of the Agricultural Organization Society, to promote their foundation by forming a special Women's Institute Section, under the Women's Branch of the Food Production Department, to undertake propaganda work in close co-operation with the Women's County War Agricultural Committees. In response, a meeting of representatives of all existing institutes decided to accept the Board's offer and to transfer all work connected with the formation of new institutes to the Board. The same meeting elected an executive committee to continue and develop the work, which had hitherto been carried on by the Agricultural Organization Society, of assisting and strengthening existing institutes. This committee consisted of the director of the Women's Branch of the Food Produc-

tion Department of the Board of Agriculture, of representatives of various Institutes, of four members appointed by the Agricultural Organization Society, two appointed by the Women's Branch of the Food Production Department, two appointed by the Board of Education and one appointed by the National Union of Women Workers, and also of Mrs. Watt as Chief Outside Organizer and of the Head of the Women's Institute Section. Thus newly organized, the movement made rapid progress. In October 1918 there were 700 institutes in England and Wales and 18 County Federations.

The movement spread to Scotland. In the spring of 1916 the Scottish Board of Agriculture was approached and asked to consider the formation of Women's Institutes favourably; and in April 1917 the Scottish Council of Agriculture resolved that Women's Institutes should be established in Scotland on the same lines as in England. A deputation to the Secretary for Scotland was favourably received, and public meetings in support of t he project were organized both in the north and in the south of Scotland. An Advisory Committee to the Scottish Board of Agriculture was set up and appointed an organizer for a term of two years. In August 1918 there were 35 Women's Institutes in Scotland and they had a total membership of 1,391.

In Ireland successful work on similar lines is done by the association known as the United Irishwomen, which was founded in 1910 and has for its aim " to raise the standard of health and living, and to press into the service of their country all classes and all sects among women whose homes and interests lie outside the township areas. "

The procedure usually followed in initiating a Women's Institute is to distribute explanatory handbills among the women of the village and surrounding country. A preliminary meeting is then called, and if it is decided to make trial of a Women's Institute a general meeting is arranged and is usually addressed by an organizer from the Food Production Department. The nascent institute then elects a committee of ten, which chooses its own officers —president, vice-president, secretary and treasurer. These may act only until the institute has been started, and at most they hold office for a year. The main business of the institute is transacted by the committee, sometimes supplemented by sub-committees. All members pay the same subscription of 2s. a year and all obey the same rules. " The institutes are little democracies. Self-governing, self-supporting, making no sectarian or political discriminations, their membership includes old and young, rich and poor, lettered and unlettered. "

The general monthly meeting, which is the chief feature of a Women's Institute, devotes only a small part of its time to mere business. It is chiefly responsible for discharging the main function of the institutes, that of giving to country women " the stimulus of work in common and play in common. " Usually a member or visitor gives an address, often followed by a discussion ; a concert or other entertainment is often held ; sometimes there is a show of cottage-garden vegetables or home-made toys or plain needlework and mending ; and halfway through the programme there is an interval for tea and talk, each member acting in turn as hostess,

The more specific work done by the institutes includes the encouragement of village industries, of economy and of co-operation.

The Northamptonshire institutes are taking up toymaking and basketmaking. In Sussex fourteen institutes and in Hampshire eight are also making toys. This industry has in fact become so important that a Toy Industry Sub-Committee was formed in the spring of 1918 and a trading society under the Industrial and Provident Societies Act is in course of formation. One institute has an upholstery class; another has successfully organized jam-making — the fruit being bought at current prices, a concession of sugar obtained from the Ministry of Food, the jam made by the members and sold first to the members and then to the general public. Institutes have also started or revived cheesemaking, and have taught and organized cobbling, rugmaking from waste material, starchmaking from diseased potatoes. In October 1918 a very successful Exhibition of Village Industries and Sale of Work, organized by the National Federation of Women's Institutes, was held in London. Economy as apart from industry was practised notably by yet another institute which organized the collection by Girl Guides of waste as food for pigs

Co-operative production and marketing were successfully practised in 1917-1918 by the Criccieth Women's Institute which attained to a turnover of more than £2,000. In Worcestershire the institutes are taking part in the County Market Scheme, which, within five weeks, increased its weekly turnover from £150 to £1000 At Chelmsford the Women's Institute has a most successful co-operative market stall. Similar co-operative enterprise on the part of the Chobham institute supplies with local produce a demand for garden produce which previously was mainly met from Covent Garden. At Haywards Heath a weekly market is held by five local institutes, which supply fruit, honey, flowers, cheese, live chickens and rabbits, vegetables, bottled fruit, jam, toys and needlework. Other institutes have pig, rabbit and goat clubs.

B. *The Village Clubs Association.* — The Village Clubs Association is intended to do for the population of a village at large what the Women's Institutes have, where they are established, largely succeeded in doing for the women. More specifically, the association exists to found clubs in villages and to strengthen and assist such as are already in being. The clubs and Women's Institutes must necessarily come into contact with each other: it is suggested that in some cases a club might be a development of Women's Institute, while in others it might form the home of an institute. The Village Clubs Association was founded only in 1918 and has therefore accomplished, as compared with the institutes, only a small amount of work. It has laid down the following principles as those which should inform a village club:

"(1) It should be the centre of all social activities, and of all forms of physical and mental recreation;

"(2) It should be self supporting and free from the element of patronage;

"(3) All inhabitants of the village, without distinction of class or

opinion, and, when practicable, of both sexes, should be eligible for membership ;

" (4) The entire control should be vested in a committee elected by the members. "

The association will provide model rules and plans for clubs, give information as to persons willing to lecture to them, and help to supply them with books and games.

It is suggested that a club building, or a village hall which the club could use, might in many cases form a memorial to the men who have fallen in the war.

ITALY.

1. THE "ISTITUTO NAZIONALE DI CREDITO PER LA COOPERAZIONE" (*National Institute of Credit for Co-operation*) IN 1918. — Report of the managing council on the fifth year of business and the balance-sheet at 31 December 1918, presented to the ordinary members' general meeting at Rome on 28 March 1919 Rome, 1919.

Founded by the royal decree of 15 August 1913, No. 1140, as a non-commercial corporation (*ente morale*) subject to government supervision and control, this Institute aims, as the reader already knows, at promoting and aiding the Italian co-operative movement in its various forms. In the few years of its existence it has extended its sphere of activity to include the most important centres in Italy, founding branches and inspection offices in the chief towns. It undertakes business of the following kinds : (*a*) discount to co-operative societies and their consortia of bills of exchange signed by two competent and solvent persons, and also of drafts on banks and of pledging tickets ; (*b*) direct grants to co-operative societies on bills accepted by them ; (*c*) advances on labour specifications, accepted invoices, orders for work of public administrations and credits with these ; (*d*) loans guaranteed by pledged securities ; (*e*) collection of debts of co-operative societies and making of payments on their behalf, acceptance of deposits, opening of current accounts, etc.

Further, in virtue of a lieutenancy decree of 4 October 1917, No. 1604, superseded by the decree of 14 July 1918, No. 1142 (1), the affording of agricultual credit to the agricultural universities of Latium was entrusted to this Institute, the necessity being recognized of giving an impulse to the growing of foodstuffs on land intended for pasture. To discharge this trust the Institute established *ad hoc* an office which is also responsible for giving assistance, in the matter of technique and administration, to the farmers of the Roman Campagna.

The report on 1918 deals with the work of the Institute in relation to the various kinds of societies, but is concerned, above all, with the societies of production and labour, that characteristic form of Italian co-operation.

(1) See our issue for October 1918, page 825.

It notes the constitution of the National Federation of Co-operative Societies of Production and Labour, which arose with the Institute's support, having a capital of 1,110,000 liras. This Federation includes 13 district consortia formed of 728 co-operative societies, of which 364,000 workmen following the most various trades are members. Having most suitable business relations and enjoying competent leadership, this Federation is in a position to offer aid to the State in the execution of the public works on a large scale involved by improvements, and by the construction of ports, railways, popular dwellings, etc.

Four Venetian co-operative societies, grouped together, belong to the Federation, and will accept contracts having relation to the particular needs of the liberated territory. Similar associations are in course of formation in other districts, as in Mantua, Naples, Bari, Catanzaro, in which the co-operative movement is gradually being developed.

Co-operative consumption, in particular, realized progress last year, being responsible for the sale of more than a thousand million liras' worth of goods; quite 1225 co-operative consumers' societies obtained credit from the Institute directly or indirectly. The lieutenancy decree of 26 May 1918, No. 723, which secured loans to a society by a special lien on goods purchased and all other goods, made possible the granting of abundant help which enabled the co-operative associations to make purchases on a vast scale. By the later decree of 3 October 1914, No. 1454, credit operations were facilitated, lending institutions being authorized to rediscount bills of exchange at a reduced rate for the whole of the year subsequent to that in which peace was declared.

As regards *agricultural co-operation* and increased production, the Institute is convinced that good results could be obtained from the agricultural labourers united in co-operative societies, and therefore encourages the rise of numerous consortia and federations, giving them the financial and technical aid which places them in a position to take large areas of land on lease.

318 associations, grouping more than 125,000 farmers, having directly or indirectly profited by the Institute's agricultural credit, were able in 1918 to cultivate 37,446 hectares of land. These undertakings put into circulation more than 14,000,000 liras, as against 3,700,000 liras in the previous year.

The Institute is now making every effort in order that the experiment of transforming labourers into farmers, which succeeded well in the lands of the great Paduan and Emilian plains, may be extended to the Venetian and Apulian countries.

We pass to an examination of the principal figures showing the business of 1918, and begin with the movement of paper. The bills discounted numbered 18,643 and were for 162,036,915 liras, as against 89,084,564 liras in 1917, 56,885,256 liras in 1916, 42,802,768 liras in 1915, and 15,447,601 liras in 1914.

Business was conducted with 651 direct clients, representing 3,077 co-operative societies, namely 2,123 consumers' societies, 640 production

and labour societies, 195 agricultural societies, and 119 miscellaneous societies. The business covered more than 94,500,000 liras of cessions of orders for work of public bodies, about 11,000,000 liras of commercial transactions, more than 40,500,000 liras of direct loans, more than 13,333,333 liras of transactions guaranteed by an agricultural lien, and about 2,500,000 liras of cessions of intermediate institutions.

Seventy-one new contracts for the cession of orders for work of public bodies were concluded, loans amounting to the total sum of 10,583,000 liras being made to 59 co-operative societies. They represent altogether 31,642,475 liras' worth of work, of which 9,550,137 liras were for public works. Since loans on the ceded orders of public bodies constitute one of the most important and typical transactions, we think it well to reproduce the following table, which gives the relevant data, distributed among districts:

Districts	No. of contracts	No. of co-operative societies	Amount of orders ceded — liras	Loans made — liras
Piedmont	—	—	—	—
Lombardy	—	—	—	—
Venetia	4	4	1,419,700	808,000
Liguria	3	3	3,300,000	540,000
Emilia	12	10	2,534,700	1,375,000
Tuscany	10	9	8,372,380	2,300,500
Marche	1	1	107,000	70,000
Umbria	—	—	—	—
Latium	27	20	13,314,509	4,578,800
Campania	14	12	2,594,186	911,000
Apulia	—	—	—	—
Basilicata	—	—	—	—
Total	71	59	31,642,475	10,583,300

The works undertaken by single co-operative societies and consortia of co-operative societies, and financed by the Institute during its five years of life, represent a value of 158,964,905 liras.

Of the 162,000,000 liras of securities noticed above, about 96,500,000 liras represent the movement of business in North Italy, about 54,000,000 liras that in Central Italy, and about 11,000,000 liras that in South Italy.

The securities held on 31 December 1918 amounted to 57,551,161 liras.

The net profit of the year, as shown by the excess of profits over losses, was 708,397 liras and notably higher than that realized in 1917, namely 341,262 liras.

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2. THE CELLAR SOCIETIES OF PAVIA BEYOND THE PO - LUIGI MONTEMARTINI: "Le cantine sociali dello Stradellese" (*The Cellar Societies of the Stradellese*), in *Cooperazione e Mutualità Agraria*, monthly supplement of *I Campi*, Rome, No. 1, February 1919.

The cellar societies of Pavia beyond the Po arose in 1902 and 1906 in one of the districts of Italy in which vines are most intensively cultivated and property most subdivided. These were years of acute viticultural crisis: "in the time of vintage, when it rained and buyers did not appear in the market, hundreds of small holders were obliged to let their grapes rot on the vines or to suffer themselves to be made the victims of middlemen and large merchants and content themselves with desperately low prices". Nevertheless it was not easy to overcome the diffidence shown towards co-operation: "everyone believed his own grapes were best and always hoped to find a purchaser disposed to give higher prices". In such conditions the first cellar society was able to arise at Montubeccaria in 1902 thanks to the trust which the few men who placed themselves at the head of the undertaking personally inspired. In subsequent years the cellar societies of Santa Maria della Versa, Montescano, San Damiano al Colle and Scorzoletta and the municipal cellar society of Canneto Pavese also arose, following the example of the Montubeccaria society. In other parts of the *circondario* of Voghera the cellar societies of Casteggio, Torazza Coste and Retorbido were founded at the same time and on the same model.

The cellar accomodation of the Montubeccaria society, the oldest and most important, is sufficient for more than 15,000 hectolitres of wine, and the same is true of the Santa Maria della Versa society. The others have smaller cellars but their vats take from 6,000 to 7,000 hectolitres. At first the prevalent type of vat was of armoured cement, but wherever is possible or convenient these are now replaced by large wooden casks which are safer and lend themselves better to the preservation of the wine.

Costs of instalment were considerable. The cellar accommodation of the Montubeccaria cost in three years, for successive enlargements of the society's premises, more than 150,000 liras, without counting at least 50,000 liras spent on machinery, implements, casks, etc. The Santa Maria della Versa cellars cost as much, and the cellars of the lesser societies all cost, for buildings and implements, at least 100,000 liras These sums were obtained by credit. The members could not disburse large sums at the outset. They were asked to pay on admittance only 1 ½ liras for every quintal of wine they intended to contribute to their society, little more than they would have had to pay to a middleman. It was moreover decided that from the income from the sale of the wine made in common, a part would annually be deducted for the gradual payment

(1) For the organization and development of Italian cellar societies see the article in our issue for July 1918.

of expenses of instalment before the distribution among members. The debts for instalment have now been almost paid off by all the members.

Credit was obtained first from the Popular Bank of Stradella and then from the Voghera savings-bank, current accounts, guaranteed by bills collectively signed by almost all the members, being opened.

The government was, for its part, somewhat liberal in the matter of making grants. The cellar societies of Pavia beyond the Po obtained altogether, on the basis of the law of 11 July 1904, No. 377, grants amounting to about 80,000 liras.

The members of these cellar societies are not obliged to contribute all their grapes to the society. Owing to the nearness of important Lombard consuming centres, the custom obtains that certain classes of consumers (lessees of land, agriculturists, farmers) buy the grapes and make their wine at home, and the killing of such local trade, which always causes certain small lots of grapes to be sold at very high prices, has been avoided. Only a share of his grapes is therefore asked of every member, enough, that is, to ensure the existence and working of the society; but every member has the right to give the society the remainder of his grapes, in so far as the society's receiving capacity allows, if he is not able to sell it for suitable prices.

There are now very many small and medium land owners who no longer attend the market, and who without obligation hand over all their grapes to their society because this course is in several ways profitable to them. They realize prices above the average; they have their vintage when the grapes are ripe; and they consign them gradually, incurring no expenses for labour, transport or the services of a middleman, etc.

A considerable sum is paid on account to members on the value of their grapes immediately after the vintage: last autumn 60 liras a quintal was paid, a sum which the society obtained by operations of credit, pledging the wine then in the cellar. All the remaining profit was distributed at the end of the year, taking into account the quality of the grapes which are classed in three or four categories in accordance with the position of the vineyards whence they are obtained and the degree of sugar ascertained to be contained in the must received. In Montubeccaria, for example, five liras more were paid for grapes of the first class than for those of the second, three liras more for those of the second than for those of the third. The average degree of sugar in the must of every class is fixed, and for every degree above the average a premium of 40 centesimi a quintal is paid, the same sum being deducted for every degree below the average.

In order to help the weaker societies, to eliminate competition among societies, and to dispose of the large supplies of the more important religious foundations, the societies federated, constituting a corporation having 100,000 liras of capital, contributed by the societies, and having its own premises at Stradella, near the railway, and its own shops for selling the wine at Pavia, Milan, Monza, Savona, Spezia, Piacenza, Bergamo and elsewhere.

An expert in winemaking was placed at the head of the federation.

Its business is to collect the wine of federated societies, make it uniform in kind, and sell it. The societies remain distinct, continuing to be independent as regards their profits and losses, capital and management. Their obligation to the federation is that which binds to themselves their individual members, the obligation of contributing a part of their wine while they remain free to sell the rest as they can. The societies of Montubeccaria, San Damiano and Montescano now however confine themselves to producing wine all of which they consign to the federation for sale. The receipts and expenditure of the federation during its first year of business (1910) amounted to 40,000 liras, to 226,000 liras in the third, reached half a million in the fifth (1914), and continued to increase until in 1917 they exceeded a million. It now sells 500 hectolitres a month on an average, and its receipts and expenditure will, present high prices being taken into account, reach two millions this year.

We should finally notice that the Santa Maria della Versa society has taken advantage of the high prices paid for grapes in recent years to induce its members to contract for collective insurance with the Istituto Nazionale delle Assicurazioni, while the Montubeccaria society has had the happy idea of inducing them to set apart part of the value of their grapes in order to constitute a fund of mutual insurance against damage wrought by hail.

3. THE DAIRY SOCIETIES OF CREMONA PROVINCE. — *Bollettino d'Agricoltura* Milan, No. 6, 14 February 1919.

Dairy societies occupy an important place among Italian organizations. They are of the various types which we described in an article in our issue for April 1917. They arose in the Alpine valleys where property is more divided than elsewhere and union is necessary to drawing a profit from milk. They are fairly common in Friuli and Carnia where there were 300 of them before the invasion. Bresciano, the Bergamesque province, Valtellina, the Upper Novarese and Valdostano include many of them. On the other hand they are rare in Central Italy and are almost entirely lacking in other districts. Altogether they number about 1400. Those belonging to the province of Cremona, which work very well, number eight, and are united in the Federation of Cremonese Dairy Societies which supplies the largest Italian consuming centres — Rome, Venice, Florence, etc. The eight dairies, the share-capital of which has been repaid to the members, are the following :

Soresina, founded in 1902 ; has 336 members and 250,000 liras of capital ; works daily 420 quintals of milk yielded by 6,000 cows ; before the war worked 700 quintals yielded by 10,000 cows.

Casalbuttano, founded in 1917 ; has 114 members and 380,000 liras of capital ; works 180 quintals of milk from 2500 cows (did work 250 quintals from 3500 cows).

Cà de Stefani, founded 1900, has 22 members and 49,200 liras of capital, works 30 quintals of milk from 400 cows (did work 42 from 600 cows).

Piadena, founded 1902; has 93 members and 66,450 liras of capital, works 30 quintals of milk from 400 cows (did work 50 quintals from 750 cows).

Forcello, founded 1893; has 28 members and 16,000 liras of capital; works 30 quintals of milk from 500 cows (did work 55 quintals from 800 cows).

Acquanegra, founded 1898, has 45 members and 72,000 liras of capital; works 55 quintals of milk from 800 cows (did work 100 quintals from 1,100 cows).

Cà de Corti, founded 1899, has 32 members and 23,850 liras of capital; works 40 quintals of milk from 500 cows (did work 61 quintals from 900 cows).

Sesto Cremonese, founded 1879; has 6 members and no share capital; works 15 quintals of milk from 200 cows (did work 26 quintals from 300 cows).

There is question of working altogether some 800 quintals of milk a day, produced by 11, 300 cows. The organization is the largest of its kind in Italy.

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4. THE FIRST WOMEN'S AGRICULTURAL INSTITUTES — *Bollettino dell'Agricoltura*, Milan, No. 6, 14 February 1919, and No 11, 1 April 1919 *La Donna nei Campi* Rome, No. 6, 1 September 1919.

On the 23rd of last March, on the initiative of the itinerant lectureship in agriculture of Milan, the first *Unione Massaie della Campagna* (Country Farmwives' Union) was founded, on the model of the farmwives' clubs so common in Belgium, France and Canada. The following are its principal aims: (*a*) to promote the general culture and safeguard the interests of women of the agricultural class, so that they may minister to the moral, hygienic and economic progress of their households, and may become a valid factor for national agricultural progress; (*b*) to form social relations among these women in different communes and provinces, so that the precious strength of womanhood may be combined for clearly marked-out and continuous work; (*c*) to render the women of the agricultural class conscious of their high social and moral mission, encouraging their technical instruction, so that they may more competently discharge the duties entrusted to them (domestic hygiene and economy, small domestic and agricultural industries, care for the home garden, scientific care of domestic animals — poultry, bees, rabbits, etc.); (*d*) to cause by various means the advantages which a country life offers to be appreciated, so that women may be in a position to take an effective part in securing a real and wholesome agricultural production.

Every woman living in the country, whatever be her status (landowner, leaseholder, wage-earner, etc.), can be an ordinary member of the Union if she be sixteen years old and pay the subscription of 5 liras a year. Countrywomen who participate in the constitution of the society by paying at least 20 liras are founder members.

The Union has a managing committee composed of three members, nominated by the agricultural institutions, and of other six members elected by the members' meeting by secret ballot.

From the six members the meeting will appoint a president, a vice-president, a secretary and a cashier.

All members of the committee will hold office for one year and be eligible for re-election. The committee will meet twice a year, the general meeting once a year, and the members at lest three times a month.

The society's funds will be entirely devoted to developing the Union, and will be employed (*a*) on collective purchasing for members (agricultural and domestic implements, selected seeds for kitchen-gardens, farmyard animals, etc.); (*b*) on installing enterprises, on model stock-breeding, on experimental fields, etc.; (*c*) on excursions for purposes of agricultural instruction; (*d*) on practical publications with a view to agricultural propaganda (pamphlets, newspapers, etc.): (*e*) on the institution of circulating libraries containing books on agricultural subjects and other healthy and agreeable literature; (*f*) on short courses of lessons and lectures on hygiene, domestic economy, agriculture, the care of stock, etc.

With this object practical means will be provided by which each countrywoman in the Union may herself become a real source of emulation and mutual instruction and may freely and with adequate knowledge take her part in all that interests agriculture.

Another *Unione Agricola Femminile* (Women's Agricultural Union) recently arose in Rome on the initiative of the editorial staff of "La Donna nei Campi". Its object is to develop small rural industries (agriculture, poultry-farming, silkworm-rearing, market-gardening, flower growing etc.) as much as possible.

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5. CO-OPERATIVE SOCIETIES FOR THE EXPORTING OF AGRICULTURAL PRODUCE. — *La Cooperazione agricola*, Bologna, No 7 [illegible], 15 March 1919, No. 11-12, 1 May 1919, and No. 1[illegible], 15 May 1919.

Among co-operative selling societies some are noticed which especially give themselves up to the export trade in agricultural produce. We think it useful to pause to consider such of them as have obtained the most interesting results.

The Bagnolo Piemonte Co-operative Society for Exporting Fruit. — This, the only society of its kind in Piedmont and perhaps in Upper Italy,

was founded ten years ago and has lately so developed that it has had to open two branches for the reception and working of fruit at Barge and Paesano, and a third at Turin for direct retail selling to consumers.

Bagnolo Piemonte is the last village in Cuneo province towards Turin, and lies in one of the most fertile fruit growing districts of Italy, in which thousands of carloads of fruit, for the most part apples, are produced.

The growers of the district, all small and many of them tiny landowners, were obliged, because they neither knew how nor were able to handle and consign their own fruit, to sell it when it was still unpicked, often at ridiculous prices.

Most of the landholders ceded their fruit by block contracts at 5 or 6 liras, or at most at 8 or 10 liras the quintal. But these prices were quintupled by a series of middlemen before the goods reached the consumer. Moreover, the best local varieties were transferred to other districts or abroad and were often placed on the market under false labels, their true place of origin being concealed. To effect that, even if the grower's receipts are doubled, the prices to the consumer are nevertheless advantageous because the middlemen who used to intervene before the fruit reached the consumer have many, if not all of them, been dispensed with : this is the aim which the persons who organized this co-operative society placed before themselves.

At the beginning a few hundred quintals of fruit were handled on improvised premises ; but when the society was established on solid foundations it made rapid progress, so that in 1917, a good year for fruit, it handled more than 30,000 quintals of fruit of all kinds, including more than 20,000 quintals of apples. And the advantages which the vast organization was to bring about did not tarry. As early as the first year in which it was active the society established its position as a buyer on all the markets of the district and the prices paid to growers were doubled.

In 1918 large buildings were constructed, with the help of the Piedmont Rural Banks' Federation (*Federazione delle casse rurali*), as warehouses and offices valued at about a million liras. The warehouses in which fruit is preserved are joined to the railway by a connecting double-line railway. In order that the discarded, damaged or small fruit may be utilized, provision is made for the installation of heavy presses, worked by electricity, which enable the manufacture of cider and fruit-wines.

By acquiring a sawmill and basketworks the Bagnolo society solved the important problem of packing. Its present production of cases, crates and baskets of all kinds fully supplies its own needs and those of its branches.

In the society's vast buildings and out of its receipts it is possible to maintain private schools, technical schools and a home for the sons of members, employees and workpeople.

Finally, the society has felt a need for propaganda and technical instruction, which it has met by instituting popular courses in fruitgrowing.

Co-operative Society for the Exporting of the Agricultural Produce of Cesena. — In the neighbourhood of Cesena there are many cherry-trees yielding valuable fruit abundantly. Before this co-operative society arose, dealers disposed of these cherries as they chose, and the growers were obliged either to sell at their prices or to let the fruit rot on the trees (1). But in 1905 a strong group of growers, wishing to free themselves from this odious exploitation by dealers, formed a corporation for the sale of their fruit in common. They rented a large warehouse for the collection and handling of the fruit and provided the means for this. To begin with, the society sold the fruit to an important firm in Verona at prices never reached previously. The excellent results of this step convinced the doubters that the most efficacious defence of their interests lay in collective action. Thus, after three years of business, the membership had risen from 126 to 169, and it should be noticed that all the members were landowners, because hitherto it had not been thought necessary that *métayers* should become direct members of the co-operative society.

But the society's vigorous growth not only pressed it towards new and more arduous enterprise but also made its sounder technical and administrative organization necessary.

It was, in fact, desired to extend collective sale to other fruit grown by members, and to the tomatoes which were an important crop in the hilly district, and it was desired also that the influence of commercial firms should be eliminated, and the goods directly exported to foreign markets. On 20 April 1908, therefore, the Co-operative Joint Stock Society for the Export of Agricultural Produce was legally constituted, membership being thrown open to *métayers* as well as landowners. This reform brought the membership up to 517 and the share capital to 13,246.16 liras. This year marks an important date in the society's life. The step was taken of acquiring ownership of the warehouse hitherto rented, and it was decided to export the cherries abroad directly, and to sell directly other fruit as well as cherries. The produce was sold by means of a special commissioner on the principal markets, under the supervision of a specially appointed member of committee.

In 1909 the society, in order to be in a position to receive and handle the enormous amount of produce consigned to it, built near the railway a vast warehouse covering 80 by 12 metres, and provided with a very commodious shed in which some 400 persons could easily work. The new building cost 65,000 liras. In the same year the society opened a greengrocer's shop in the town and began the manufacture of wicker baskets for cherries.

In 1911 it promoted among its members the growing of tomatoes for preserving, and this branch of horticulture, which had hitherto been unknown in the district of Cesena, is today destined to furnish work to three local canneries which have arisen in succession.

(1) See *Società Anonima Cooperativa per l'Esportazione dei Prodotti Agrari. Come nacque e crebbe la nostra cooperativa.* Cesena, Vignuzza, 1911.

The war impeded exporting and therefore much limited the society's work; but compensation was partly found in exporting casks of sulphurized cherries to the United States, and in any case the large production of tomatoes for preserving, which was somewhere round 25,000 quintals a year, made an important amount of work sure.

In the following table the progressive growth of the society is apparent.

Development of the Co-operative Society for Exporting the Agricultural Produce of Cesena.

Year	Membership	Shares subscribed and paid up	Share capital	Sales - Quantities	Sales - Amount
			liras	quintals	liras
1905	126	—	3,595 95	1 2 6.93	37,261 50
1906	146	—	4,460 61	2,69 .00	63,191 06
1907	169	—	7,066.16	2,65 .01	80,145 91
1908	517	618	13,246.16	4,1 3.42	109,253 90
1909	586	715	14,701.15	9,31 .43	142,511 46
1910	613	770	15,251.15	4,95 1 31	110,503 03
1911	613	770	15,251.15	4,959 60	87,303.52
1912	613	770	12,103.61	1,825.30	36,007.63
1913	704	1015	18,091 37	29,181.82	171,543.26
1914	721	1075	18,099.83	31,516.07	213,447.53
1915	730	1080	19,552 81	27,131 11	149,123 60
1916	731	1092	20,116.19	24,325.11	156,371.88
1917	731	1092	23,097.05	25,155 60	105,011.56
1918	756	1717	12,733 11	23,612.7	330,761 00

The slow and moderate increase of the share-capital is due to the fact that profits go mainly or wholly to paying off costs of installation. The society has today paid for all its buildings, so that its real capital is about 200,000 liras.

The Vegetable and Fruit-growing Co-operative Society of Pedaso (Ascoli Piceno). — This society was founded in 1905 on the initiative of the itinerant lectureship in agriculture of Fermo, and has had 14 years of prosperous life. Its chief object is to promote scientific fruit and vegetable growing, in particular the growing of peas, and to look after the collective exporting and selling of this produce in the best possible conditions. When initial difficulties had been overcome it easily established itself, as appears from the data in the following table :

Development of the Vegetable and Fruit-growing Co-operative Society of Pedaso.

Year	Membership	Total sales	Sales of Peas		Share capital
			Quantity	Value	
		liras	quintals	liras	liras
1904	56	—	—		1,696
1905	497	54,712	4,580	62,539	1,696
1906	589	62,528	5,322	65,721	1,697
1907	597	68,075	5,050	60,078	1,705
1908	610	65,894	4,800	58,788	1,717
1909	621	79,730	5,000	69,567	1,729
1910	646	74,007	4,500	69,007	1,746
1911	607	66,169	4,000	62,754	1,759
1912	688	89,644	3,900	71,645	1,777
1913	692	1,53,413	5,500	88,787	1,794
1914	698	1,09,628	4,645	81,246	1,840
1915	712	78,915	3,302	45,278	1,969
1916	717	2,28,985	2,133	66,455	2,134
1917	765	2,35,473	2,224	74,089	2,331
1918	825	3,06,320	3,498	189,253	3,431

The society sets before itself the improvement of horticultural technique, and it helps its needier working members, supplying them, at a low rate of interest, with the capital they need in their industry.

The Co-operative Joint-Stock Society for Exporting the Agricultural Produce of Jesi. — The figure standing for this society's (1) sales in 1918-19 reached 1,647,360 liras. Net profits amounted to 11,212 liras. The sales of various kinds took place amid marked difficulties of transport. The two cocoon dessicators were busy, bringing the society a net profit of 5,931 liras. On 31 March 1919, when the business-year was closed, the capital and reserve fund amounted to 287,600 liras.

6. THE ITALIAN FEDERATION OF AGRICULTURAL CONSORTIA IN 1918. — *L'Italia Rurale*, organ of the federation. Piacenza, No 544, 9 May 1919.

The Italian Federation of Agricultural Consortia, which arose in Piacenza in 1892, is the most powerful co-operative organization for the collective purchase of material useful to agriculture in Italy. Continuous expansion and improvement have brought it to a very advanced state of development, so that it now includes about a thousand federated societies.

(1) See the report for 1918-19 approved by the members' general meeting on 6 July 1919.

It spends millions and millions of liras on acquiring agricultural material, which it resells to its members at profitable prices, giving a guarantee of quality. It imports on its own steamers the primary material needed for making chemical manures, material which is afterwards treated in the co-operative perphospate factories established by the consortia, which make purchases in strict union with the federation.

The general warehouses, the co-operative dessicators for cocoons the olive-presses, the consortia for the acquisition and use in common of machinery and the connected workshops for repairs and the scientific machines for the mechanical selection of seed represent some of the federation's beneficent enterprise.

The federation is also active in the field of education, supporting the itinerant lectureships in agriculture and seeking, by suitable lectures and cinematographs, to arouse in the rural population an interest in the most modern and effective methods of fertilizng the soil. With the object of popularizing the use of chemical manures it has promoted the establishment of many experimental fields.

The important question of mechanical ploughing has also been accurately studied by the federation's experts who made the results of their studies known in a report. The federation has also given a strong impulse to the nation's production of agricultural machinery.

In 1918 total sales reached the sum of 104,357,014 liras (machinery included), but this was partly due to the very high prices of primary material, to the rate of exchange, to high freights, and to the cost of insurance against war risks and of labour, etc. Owing to the duration of the war the federation had to confine itself almost exclusively to the business of collective purchasing, and to buy only a few kinds of goods.

For the 1918 spring farming season the federation, thanks to the support of the Ministry of Agriculture, directly imported nitrate of soda from Chile, at the price of 109 liras the quintal.

The business of collectively treating sulphate of copper increased notably, the quantity so treated being 185,499 quintals which the association obtained at 190.20 liras the quintal when the maximum price was 228 liras. The quantity of sulphur treated was 48,732 quintals, and had noticeably increased since the previous year. The quantity of Kaffir paste, 14,350 quintals, had on the other hand slightly diminished. The quantity of concentrated forage was about 14,000 quintals. A notable increase was that of seed for sowing, of which the quantity reached 40,000 quintals. The supplying of phosphates required the federation's whole attention, and nine co-operative factories which handled 42,365 tons were supplied. A new field of activity on which the federation embarked was that of the production of and trade in selected seeds for agriculture.

The sales of the machinery section reached 15,387,053 liras, including sales of 2,769 ploughs of Italian manufacture, 2,645 mowers, 359 reapers and binders, and 546 tractors. This figure for sales was never reached before, and was partly due to the greater demand for machinery to compensate for the deficiency of labour and animal power, and partly to the

fact that many demands once directed to private trade now turn rather to the agricultural associations and through them to the federation.

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7. THE DEVELOPMENT OF THE NATIONAL BANK OF RURAL BANKS — Report on fourth year of activity (1918) of the managing committee and the auditors to the members' ordinary meeting at Rome on 30 March 1919. Rome, 1919.

The National Bank of Italian Rural Banks, founded in 1914, aims mainly at "aiding the rural banks and other co-operative and mutual societies intended for the diffusion of credit among small farmers". It continues to make progress, as appears by the balance-sheet for its fourth year of business which closed on 31 December 1918. Its discounts in that year amounted altogether to some five million liras, having increased by nearly two million liras since the previous year.

In its four years of life the bank has made the following discounts:

in 1915 for	948,829.28	liras
» 1916 »	2,690,410.73	»
» 1917 »	3,096,067.08	»
» 1918 »	4,914,493.02	»
	11,649,800.11	»

Savings deposits and deposits on current account amounted to 1,432,827.48 liras, as compared with, 1,008,858.53 liras in 1917. The year's profit was 21,193.50 liras, plus 11,771.01 liras from the profit of the previous year.

The share capital and the ordinary and extraordinary reserve funds amounted to 160,448.18 liras.

RUSSIA.

1. CO-OPERATIVE FORESTRY SOCIETIES IN NORTHERN RUSSIA — *The Russian Cooperator*, Vol. 2, No. 3, and vol. 3, No 7 London, February 1918 and July 1919.

On the 20th November 1917 a special bureau was formed at Archangel for the purpose of convoking a conference of representatives of peasants engaged in timber felling. The conference took place on the 16th December of that year and decided to found the *Northern Union of Co-operative Timber Associations*. The Union was to pursue purely economic aims, to strive to emancipate the peasant timber-fellers from dependence on private capital, and to enable them to obtain the full value of their work by means of marketing the products directly, both at home and abroad. The conference stimulated the organization of *timber artels* (co-operative forest societies), and a little over a month later 25 artels operating in the

provinces of Archangel and Olonetz were already represented at the first conference of the Union.

The work of the forest labourer is closely bound up with the rivers, which serve as the only routes for bringing the felled wood to the sawmill and to the market. Accordingly, the artels are subdivided into a number of groups, each connected with the basin of a particular river. There are now seven such groups in the North of Russia, those of the North Dvina, the Kotlass, the Emetz-Mechrenga, the Pinega, the Vaga, the Onega, and the Mezen. The Pinega basin has the largest number of artels — 34 in all — the second place being occupied by the Onega basin with 28 artels, the other five basins having each a number of artels varying from 10 to 17 artels.

More than half of the artels, namely, 50, were formed during the first two months after the formation of the Union. After this the number of new artels formed monthly ranges from nine to seven, the rate being even much lower since August-September 1918. The reduced rate of the formation of new artels is due chiefly to the political conditions which have separated the Union from some of its groups of artels.

The membership of individual artels varies greatly, the highest figure being 1,200 persons, and the lowest eight persons. The most common figure is from 50 to 120 members, there being only two artels with a membership over 300, while the number of artels having less than 50 members is 25. The growth of the membership of the artels of river-groups continues, as illustrated by the following table:

Artels of river-groups	Membership	
	December 1st. 1918	January 15th. 1919
Vaga	2.854	4,012
North Dvina	693	1,544
Onega	1,821	2,869
Emetz-Mechrenga	1,268	1,824
Pinega	1,450	1,509
Total . . .	7,986	11,758

The value of the shares of individual artels varies from 10 roubles to 500 roubles per share. In the majority of cases the value of the shares is between 25 and 50 roubles, while eleven artels have shares of smaller value. In 15 artels the shares are of 100 to 125 roubles, and only four artels have shares of a value higher than 150 roubles, the highest figure being 500 roubles. As a rule, the larger the membership of the artels the smaller the value of the shares; and further, the shares are of a higher value in districts where forestry is the chief occupation of the population, and of a lower value in districts where other agricultural trades prevail.

In addition to their holdings in shares, members of the artels bear also

a further responsibility for its affairs, the responsibility amounting to from 2 to 25 times their holdings. As a rule, the additional responsibility is lower in the artels where the share value is high and vice versa.

The artels which were working in December 1917 and January 1918 have handled up to half-a-million of pieces of large timber, in addition to sleepers and other kinds of wood. For the sawing of its timber the Union acquired in the summer of 1918 two large sawmills at Archangel. Notwithstanding the conditions in Russia, the sawmills turned out and brought to the market 6,000 standards of sawn timber, besides other wood goods.

2 "ARTELS" OF FISHERMEN ON THE ESTUARY OF THE AMUR AND ON SAKHALIN. — *The Russian Co-operator*. Vol 3 Nos 1 and 3. London, January and May 1919.

The Estuary of the Amur and the western coast of Northen Sakhalin yield annually from 2,000,000 to 4,000,000 poods of salmon and "gorbusha" (a kind of salmon of the so-called first or spring migration). In summer and autumn, in the town of Nikolaievsk-on-Amur and on the coast of the estaury of the Amur, tens of thousands of men, sometimes for the whole 24 hours of the day, are hard at work preparing fish for export.

In 1916 the Union of Siberian Co-operative Unions (Zakupsbyt) opened an agency in Nikolaievsk-on-Amur. This agency, assisted by the local consumers' society, "The Mutual Aid", took up the question of a more rational organisation of "artels" of local peasant fishermen (co-operative fisheries), and as a result of its efforts an "artel" of 40 men, bound by contract, was organized in the village of Vlassievo in Saklialin, and five or six other "artels" were formed in other places. The Vlassievo "artel" opened a consumers' stores and a credit society, and its example aroused great interest among local fishermen, who at their various meetings decided to form a number of such societies and bind them together in one union.

The importance of the fisheries of the Amur can be gauged from the fact that in 1917 they engaged over 15,000 persons and supplied the population of Russia with 1,200,000 poods of fish, and 38,000 poods of caviar, to a total value of 30 million roubles. But of these fisheries only about one-third were co-operative fisheries. The "Zakubsbyt" acts as the principal buyer of the fish from the "artels", marketing the fish in Siberia and Russia. In 1916 the "Zakubsbyt" marketed in this way up to 100 000 poods of fish; in 1917, notwithstandug the unfavourable conditions of the time, 400,000 poods, worth over five million roubles and in 1918 nearly 500,000 poods. Owing to the rise in prices and depreciation of the rouble the sum paid for the fish rose to over ten million roubles.

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3 CO-OPERATIVE CREDIT IN THE UKRAINE.—*The Russian Co-operator*, Vol. 3, No. 6. London, June 1919

The development of co-operative credit in the Ukraine followed the lines and proceeded at the pace of the progress of this branch of the co-operative movement in the whole of Russia. In the middle of 1915 there were 2,185 credit associations in the Ukraine (out of a total of 15,159 for the whole of Russia); in the middle of 1916 their number rose to 2,908, and at present it can safely be assumed to have reached 3,000. The last figure does not include the 400 odd credit associations operating in Bessarabia.

The Odessa Credit Union. — In the Ukraine there are about 40 Credit Unions embracing 2,400 organisations. The Odessa Credit Union can be regarded as typical of all the unions in the Ukraine. The union was formed in November 1915 and began operations on 1 January 1916. The growth of its operations since then can be seen from the following table:

Date	No of associations	Share capital — Roubles	Balance sheet totals — Roubles	Sales turnover — Roubles	Deposits — Roubles
1 Jan. 1916.	10	1,501	33,717	1,620,000	9,000
1 Jan. 1917	94	25,556	983,429	6,000,000	513,000
1 Jan. 1918.	115	45,760	19,218,602	8,000,000	1,900,000
1 Jan. 1919.	96	55,985	22,000,000	—	5,000,000

The Odessa Credit Union conducts large operations both in marketing the grain of its members and in supplying them with manufactured commodities, such as cloth, leather, footwear, matches, soap, tobacco, etc. The Union has formed an agricultural bureau which caters for the needs of the agricultural population, to which it supplies coal timber, agricultural machinery, implements, etc. The bureau is also engaged in providing the population with improved seeds, and, at its instance, all the credit unions of the province of Kherson have jointly taken over the seed farm of the South Russian Agricultural Society, and have assigned half-a-million roubles for its maintenance and working. The Bureau engaged the services of seven agricultural experts. The Credit Union has a large staff of instructors, a library and book shop, seven depots for the sale of agricultural machinery, and four branch offices in the district.

Since its formation the Credit Union has sold to the Government about four millions poods (about 67,000 tons) of grain, worth 14 million roubles, while it has supplied the population with various goods worth 155 million roubles, in addition to agricultural machinery to the value of one million roubles.

The Ukraine-Bank. — The head offices of the Ukrainian People's Bank, shortly named " Ukraine-Bank " which acts as the central co-operative bank for the country, are situated in Kiev. The project of such a bank originated as early 1911, but it could be realised only in 1917, after the Revolution. Only members of co-operative societies may be shareholders, and the bank only deals with members of the Co-operative Union. The Ukraine-Bank opened its operations on 1 August 1917, with a share capital of one million roubles, which was increased at the end of 1918 to ten million roubles. The balance sheet of the bank on 1 December 1917, i. e., after three months of working, showed a total of two millions, which figure rose on 1 December 1918 to 47 millions. The amount of deposits was 2,700,000 roubles on 1 January 1918, and 17 million roubles on 1 December of the same year. The number of co-operative societies which took up the shares of the bank rose from 36 on 1 January 1918 to 127 on 1 December of that year. During the first ten months of 1918 the Ukraine-Bank sold 44 million roubles worth of goods, and the value of the goods in store represented another 77 millions.

SWITZERLAND

1. THE FEDERATION OF AGRICULTURAL CO-OPERATIVE SOCIETIES OF NORTH-WEST SWITZERLAND IN THE YEAR FROM 1 JULY 1917 TO 30 JUNE 1918. — X-XIII, *Geschäftsbericht des Verbandes landw Genossenschaften des Nordwestschweiz.* Brugg, 1915-1918.

The development of this federation, which is concerned with sales and purchases of articles useful to agriculture on behalf of its adherent societies, was as follows from 1915 to 1918.

1915	Number	of	federated	co-operative	societies	70
1916	»	»	»	»	»	76
1917	»	»	»	»	»	80
1918	»	»	»	»	»	89

From the profit and loss account of 30 June 1918 it appears that the year then ending closed showing a net profit of 21,000 francs. The balance-sheet was closed on the same date with a balance of 301,016 francs.

The total receipts and expenditure of the federation in 1916-17 and 1917-18 were follows.

	1917-18		1916-17	
1. Forage and various goods	1,666,473.75	francs	2,654,683.95	francs
2. Manures	685,141.35	»	449,538.95	»
3. Seeds	47,613	»	49,471.25	»
Total . . .	2,399,228.10	»	3,153,694.15	»

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* *

2. THE FEDERATION OF DAIRY AND CHEESEMAKING SOCIETIES IN NORTH-WEST SWITZERLAND IN THE YEAR FROM 1 MAY 1917 TO 30 APRIL, 1918 — XI, XII, XIII *Jahresbericht des Verbandes Nordwestschweizischer Milch- und Käsereigenossenschaften.* Listal, Lüdin, 1916, 1917, 1918.

The Federation of Dairy and Cheesemaking Societies of North West Switzerland was in the following position on 30 April 1918

Canton	Number of co operative societies	Membership	Individual members	Number of cows	Milk supplied daily
1. Argovia	23	804	6	2,759	10,906
2. Basle — Country .	70	2,034	41	10 399	48,983
3. Basle — Town . .	2	96	8	1,442	10,304
4. Berne	48	1 583	15	6,084	23,858
5. Soleure	94	2,890	46	11,130	51,845
	237	8,007	117	31,814	145,896
1917 (30 April) . .	238	7,572	115	32,816	150,311
1916 (30 April) .	232	7,452	60	31,938	168,326

The work of the federation is developing satisfactorily, in spite of hourly increasing difficulties and the scarcity of milk. The new Central Buttermaking Society works regularly and yields the best results. The federation was represented in the army in the person of the Central Federation which aims at distributing in districts where production is slight the milk taken from districts where it is large. The year from 1 May 1917 to 30 April 1918 closed showing a balance of 187,711.27 francs of which 133,059.62 were assigned to the reserve fund

3. THE WINTERTHUR FEDERATION OF THE AGRICULTURAL CO OPERATIVE SOCIETIES OF EAST SWITZERLAND IN 1917. — XIX-XXI *Jahresbericht des Verbandes ostschweizerischer landw Genossenschaften in Winterthur* 191 -1917. Brugg.

The movement affecting the composition of this federation which,like many others of its kind, undertakes the purchase and sale of agricultural requirements on behalf of its affiliated societies, was as follows in the year 1917, the last year for which we have a report

Affiliated on 1 January 1917	200	co-operative societies
Joined the federation.	14	» »
Left the federation.	1	» »
Affiliated on 31 December 1917 . .	213	» »

Membership on 1 January 1917 . .	15,578	members
Membership on 31 December 1917. .	18,191	»
Increase in 1917	2,593	»

The development of the federation in the three years from 1915 to 1917 appears from the following data:

Year	No. of co-operative societies	No. of members	Total purchases and sales	Reserve fund
			Francs	Francs
1915	186	14,602	11,734,318	220,000
1916	200	15,578	14,744,207	230,000
1917	215	18,191	21,902,977	245,000

From the profit and loss account it appears that this federation closed the year 1917 with a net profit of 137,697 francs, of which 123,934 francs were absorbed by various operations and 13,763 francs were carried over. The balance-sheet of the federation closed showing totals of 4,128,149 francs.

* * *

4. THE FEDERATION OF AGRICULTURAL CO-OPERATIVE SOCIETIES OF THE CANTON OF ST. GALL AND THE SURROUNDING TERRITORY FROM 1 JULY 1917 TO 30 JUNE 1918. — XIV-XIX *Geschäftsberichte des Verbandes landw. Genossenschaften des Kantons St. Gallen und benachbarter Gebiete pro* 1914-15-1917-18. Buchdrückerei Buchs A. G. 1915-1918.

This federation, like other similar institutions, undertakes on behalf of its affiliated societies the purchase and sale of agricultural requirements.

Its development in the last four years has been as follows:

Year	Number of societies	Membership	Total purchases and sales
			Francs
1915	52	8,160	683,328
1916	59	8,421	1,057,703
1917	61	9,863	2,176,571
1917-18	69	11,443	1,782,793

The increase last year was therefore one of 8 co-operative societies and 1580 members.

This federation closed its profit and loss account on 30 June 1918, showing a net profit of 4,106.95 francs.

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5. THE FEDERATION AT WINTERTHUR OF AGRICULTURAL ASSOCIATIONS AND CO OPERATIVE SOCIETIES OF ZURICH (CANTONAL AGRICULTURAL FEDERATION), FROM 1 JULY 1917 TO 30 JUNE 1918. — XIX-XXII *Geschäftsberichte des Verbandes Zürch landw. Vereine und Genossenschaften (Landw Kantonalverband) in Winterthur über die Geschaftsjahre* 1914-1918. Winterthur, Sailer, 1915-1918.

This federation undertakes the purchase and sale of agricultural requirements on behalf of its affiliated societies.

From 1915 to 1918 the number of affiliated societies and of members and the total purchases and sales of the federation were as follows :

Year	Number		Total purchases and sales
	of societies	of members	Francs
1914–1915	71	5,615	1,644,281
1915–1916	75	5,797	2,247,331
1416–1917	86	6,501	3,669,537
1917–1918	84	7,000	2,878,206

In 1917-18 receipts amounted to 98,626 francs, expenditure to 92,296 francs. The net profit was therefore one of 6,330 francs.

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6. THE FEDERATION OF AGRICULTURAL SYNDICATES OF THE CANTON OF BERNE AND ADJACENT CANTONS FROM 1 JULY 1917 TO 30 JUNE 1918. — XXVII-XXIX *Rapport annuel de la Fédération de Syndicats agricoles du Canton de Berne et des Cantons limitrophes.* Moiat, Siauby, 1916-1918.

This federation obtained the following results in the year which closed on 30 June 1918 : on 1 July 1917 it included 222 syndicates, to which 16 had been added on the 24th of November of that year ; on 30 June 1918 it was made up of 238 syndicates.

In 1918 a census was taken of the members of the syndicates and it was found that they numbered 26,000. More than half the farmers of the district in which the federation is active belong to the syndicates in question.

This federation also undertakes the purchase and sale of agricultural requirements on behalf of its members. The development of its business in the last three years has naturally been affected by the state of war in consequence of which its total purchases and sales have, as regards their quantity, gone back to their level of more than ten years ago. While the membership is almost double what it was at that date the weight of goods handled is hardly equal to what it then was.

Total Purchases and Sales in Tons.

	Total	Average per syndicate
1915	40,838.2	190.8
1916	43,368.3	199.9
1917	40,898.5	181.7
1918	31,292.2	125.1

Value of Goods in Thousands of Francs.

	Total	Average per syndicate
1915	7,181.2	33.6
1916	8,833.6	40.7
1917	11,504.4	51.1
1918	8,741.2	34.9

Part II: Insurance and Thrift

UNITED STATES.

FARMERS' MUTUAL FIRE INSURANCE COMPANIES.

SOURCE (OFFICIAL):

VAIGREN (V. N.), Investigator in Agricultural Insurance Bureau of Markets: Prevailing Plans and Practices among Farmers' Mutual Fire Insurance Companies. United States Department of Agriculture Bulletin No. 780. Washington, 28 May 1919.

In our issue of June 1917 (1) we dealt at some length with the general conditions of insurance against fire in the United States and gave a brief account of the very numerous farmers' mutual insurance companies. There has recently been published a Bulletin of the Department of Agriculture, based upon the replies to a questionnaire sent out by the Bureau of Markets and giving detailed particulars of the organization and working methods of these societies. In view of the practical value of the information resulting from the inquiry we propose to reproduce the principal data contained in the Bulletin.

There are, it appears, about 1,950 mutual fire insurance companies whose risks consist either entirely or very largely of farm property, and the total amount of insurance which they now have in force exceeds $6,000,000,000.

In most States where these companies exist they are recognized as a separate and distinct class of insurance organization and operate under laws which practically limit the insurance written by them to country risks. In several of the Eastern States and some of the Southern States, however, no such distinct class of farmers' mutuals has been provided for by statute. In these latter States, therefore, it is frequently difficult to determine which of the mutual fire insurance companies should be considered farmers' mutuals and which should not. No company has been included in the above or in succeeding figures whose reply indicated that the risks carried were other than farm property to an extent greater than 35 per cent.

Of the organizations complying whith the above-mentioned requirements a total of 1,161 companies filled out the questionnaire.

§ 1. SITUATION OF COMPANIES, DATE AND METHOD OF INCORPORATION.

Farmers' mutual fire insurance companies are found in greater or

(1) Page 31.

smaller numbers in all the States except Florida, Louisiana, New Mexico, Arizona and Nevada. More than four-fifths of these companies, however, are situated in the Middle Atlantic and the North Central States.

For most of the States the date of organization of the insurance companies is given in the annual report of the insurance department. Using both the questionnaire and the insurance reports, it has been possible to determine the date of organization of 1,879 of the farmers' mutual fire insurance companies. The number of existing companies which were organized during each decade is indicated in the following table:

	Companies		Companies
1820-1829	2	1870-1879	484
1830-1839	8	1880-1889	333
1840-1849	38	1890-1899	450
1850-1859	61	1900-1909	254
1860-1869	98	1910-1917	151

Of the 1,161 companies replying to the questionnaire 124 were incorporated by special acts of the legislatures, while 967 were incorporated under general statute. Twenty-one of the companies existed as voluntary associations without incorporation and 49 gave no information on this particular question.

Most of the companies incorporated by special charter are in the East and Southeast. The companies in the Middle West and the far West, on the other hand, are almost universally organized and operated under general statutes enacted specifically for farmers' mutuals. The unincorporated associations were almost entirely confined to Indiana and Missouri.

§ 2. Membership and votes.

One thousand one hundred and sixteen companies reported the number of members. The smallest membership of any company was 25 and the largest was 32,433, the average membership for the 1,116 companies being 1,532. Twenty-eight companies had a membership of less than 100 while 313 had a membership of between 100 and 500, and 257 had a membership of between 500 and 1,000, making a total of 598 companies reporting, each of which had less than 1,000 members. The companies having less than 100 members were in general recent additions to the list of farmers' mutuals. Two hundred sixty-seven companies had a membership of between 1,000 and 2,000; 130, between 2,000 and 3,000; and 62 between 3,000 and 5,000; while 59 companies had 5,000 or more members. Nearly four-fifths of the 1,116 companies reporting membership, therefore, were organizations of less than 2,000 members.

Information concerning the voting privilege of members was given by 1,150 companies. Of these, 933 reported that each member had one vote, while 217 reported that plural votes based upon either the amount of insur-

ance or the number of policies held by a given member were allowed. Of the 217 companies allowing plural votes, 179 used the amount of insurance and 38 used the number of policies held in determining the number of votes granted to a member. The prevailing plan, as the figures indicate, is to allow each member one vote regardless of amount of insurance or number of policies held. More than four-fifths of the companies followed this plan.

§ 3. Directors and officers.

The maximum number of directors of any one of the 1,140 companies reporting on this point was 55 and the minimum was 2.

The average as well as the most common number of directors for the companies reporting was 9, and 405 companies actually reported this number for their organization.

The term for which directors are elected was reported by 1,144 companies. The term was one year in the case of 517 companies, two years in the case of 62 companies, three years in the case of 508 companies, four years in the case of 43 companies, and five years in the case of 11 companies. One company reported the term of directors as seven years; and 2 reported that the directors held their positions without any limitation as to term of office It thus appears that the favourite term of directors is either one or three years. It may also be stated that in a number of the laws more recently enacted it is specifically prescribed that the term of directors shall be three years and that one-third of the number shall be elected each year.

Of the 1,145 companies giving information concerning the term for which officers are elected, 1,032 gave one year; 47 companies gave two years; 53, three years; 11, four years; and 2, five years. In the case of officers, therefore, as distinguished from directors, the practice of a one-year term is fairly uniform among the farmers' mutuals.

Besides directors and officers, 249 companies reported an auditing committee; 240 companies reported an executive committee; and 106 companies reported an adjusting committee. A few companies reported yet other committees under such titles as appraising, valuation, application, revision, inspection, cancellation, arbitration, appeals, finance, and advertising. A number of these terms refer, of course, to committees with identical or at any rate similar duties.

§ 4. Hazards and risks.

All the companies returning questionnaires gave information concerning the hazards against which insurance was written. Thirty-three companies insured against fire only and 958 against fire and lightning. One hundred and seventy companies reported giving so-called combined protection, covering fire, lightning and windstorm in their contract.

Farmers' mutuals writing combined protection were found in nearly all States with the exception of those located in New England and on the

Pacific coast. In the case of companies operating in all or the greater part of a State the offering of windstorm protection as well as of fire and lightning protection is a fairly common practice everywhere. This practice, in so far as it relates to county or relatively local companies, however, is limited largely to the States of the South. In a number of the States of the Middle West special windstorm insurance companies doing a State-wide business and working in close co-operation with the local fire insurance mutuals have been developed. The plan of carrying windstorm insurance by a relatively local company has proved disastrous in a number of instances, the losses from a single severe storm in a community not infrequently exceeding all available resources of a small company. From the point of view of the fire hazard, on the other hand, so far as the typical farming community is concerned, each group of farm buildings and to a considerable extent each building in the group constitutes a separate and distinct risk, and hence nothing corresponding to a conflagration hazard is present. Considerable allowance may of course be made for differences in the probability of severe windstorms in different sections of the country, but experience has proved that few, if any sections are entirely exempt from the most destructive form of windstorm known, namely, the tornado.

All but four of the companies reporting gave information concerning the property insured. One thousand sixty-four companies reported insuring only farm property and similar segregated risks within the limits of cities or villages, while 93 companies reported insuring also a larger or smaller amount of other city property.

Among the 898 companies which reported the maximum single risk accepted by them, the highest for any company was $15,000 and the lowest $750. A total of 349 companies reported their maximum single risk as larger than $4,000, and only 58 companies provided for a maximum of less than $2,000. The average of such maximum risk for these companies was $3,994. Two hundred and sixty-three reports gave no reply to this question. The significance of these figures, it should be pointed out, is materially lessened by the fact that the definition of a "single risk" or "any one risk" as used by these companies is by no means uniform, some companies applying the term to all the property insured on a given farm, or even in a few instances to the property covered by a single policy, while others use it in the more appropriate sense as signifying a unit or group of property subject to destruction by a single fire.

The highest percentage for which insurance is granted by any of these companies was reported as 100 per cent of the cash value and the lowest such maximum was 33 per cent. The average percentage fixed as a maximum for insurance granted was 70 per cent of the cash value. Only 41 companies reported accepting risks for more than 75 per cent, and only 14 companies reported the maximum percentage of value permitted to be insured as less than 66 $^{2}/_{3}$.

The maximum term for which policies are issued was given by 1,555 companies, and of these 806 gave 5 years as such maximum. Thirteen companies reported writing policies for not longer than 1 year; 58, for not longer

than 3 years; 19 for not longer than 4 years; and 19 others, for not longer than 6 years. Thirteen companies reported writing policies for terms up to 7 years and 13 others for terms up to 10 years. Perpetual or annually renewable policies were written by 214 companies. It appears, therefore, that 5 years is the most common maximum period for which policies are issued by these companies, more than two-thirds of them reporting this term, while nearly one-fifth of the farmers' mutuals issue policies which remain in force as long as assessments are met by the insured or until the company finds reason to cancel the insurance.

§ 5. Business territory.

Information concerning the territory to which they confine their operations, either as the result of legal restrictions or of self-imposed limitations, was given by 1,145 companies. Of these, 386 companies reported their business territory on a township basis; 715, on a county basis; and 44, on a State basis. Of the so-called township companies, 87 operated in a single township; 38 in 2 townships; 21 in 3 townships; and 32 in 4 townships. Ninety-eight companies operated in from 5 to 9 townships; 40 in from 10 to 14 townships; 44 in from 15 to 24 townships; and 26 in 25 or more such units of area. The companies operating on a township basis are most common in Illinois, Wisconsin, and Minnesota, although a considerable number of such companies are also found in Maine, New Hampshire, New York, Pennsylvania, and Ohio.

Of the 715 companies reporting their business territory on a county basis and therefore frequently termed county companies, 373 operated in all or a part of a single county; 102 operated in 2 counties; 87 in 3 counties; and 44 in 4 counties. Eighty companies operated in from 5 to 6 counties; 17 in from 10 to 14 counties; 6 in from 15 to 24 counties; and 6 others in 25 counties or more.

Of the 44 companies reporting business territory on a State basis, 11 indicated that they operated in part of the State; 29 that they operated in an entire State; and 4 that they operated in two States.

It may be pointed out in this connection that some of the earliest farmers' mutual insurance laws limited the companies organized thereunder to a single township. There has been, however, a general tendency to increase the business territory permitted, and more recent laws almost invariably prescribe a maximum business territory on a county basis.

§ 6. Plan of raising funds and frequency of assessment.

Twenty-five of the 1,161 companies returning questionnaires reported doing business on a fixed premium plan, while 1,113 reported relying mainly or in part upon assessments for their funds with which to meet the obligations assumed. Twenty-three companies gave no information upon this point. Most of the companies operating essentially on the assessment plan collect in advance a membership or policy fee together with a slight

advance charge based on the amount of insurance written. The policy or membership fee collected varied from $15 to 25 cents. The average such charge for all the companies reporting was $1.54. The $15 fee, a membership fee collected only once from each member, was charged by only a single company, the next highest membership or policy fee being $5. Only 17 companies reported such charges in excess of $3, and only 45 companies reported similar charges of less than $1. The initial charges based on the amount of insurance written varied from 50 cents per hundred per year to two-tenths of a cent per hundred per year, the average of such charges being approximately the equivalent of 6 cents per hundred per year for the term of the policy.

In reply to a question on frequency of assessments, 121 companies reported that no assessment had hitherto been made. Of the remaining companies 76 reported having made but 1 assessment during the last five years, while 99 reported having made 2 assessments during the same period; 135 reported 3 assessments; 116, 4 assessments; 413, 5 assessments; 62, 6 assessmets; 26, 7 assessments; 22, 8 assessments; and 21, 9 assessments. Thirty companies reported from 10 to 14 assessments, and 9 more than 15 assessments. The greatest number of such assessments levied by any one company during the last five years was 29. Thirty-one companies did not report the frequency of assessments. From the figures just given it may be seen that the most common plan is that of annual assessments, while in the remaining cases less frequent assessments than 1 per year are considerably more common than more than 1 assessment during the 12-month period. The plan of collecting in advance at least one year's estimated cost of insurance, and the assessing in advance for each of the succeeding years of the policy term, appears to be gaining in favour among these companies.

§ 7. Liability of the insured.

Of the companies reporting, 829 operated under the unlimited liability plan, the insured obliging himself to pay his pro rata share of all losses and expenses legally incurred by the company. Of the remaining companies, 215 reported limiting the liability of the insured to a specific amount, while 117 companies returning questionnaires gave no information covering this question. The average obligation assumed by the policyholder in the companies which reported limited liability was equal to $1.41 per hundred per year while the policy remained in force. A special note was required as evidence of the liability of the insured by 161 companies while the greater number reporting, namely 872 companies, relied on a clause in the insurance contract for the validity of the obligation assumed by the insured. One hundred and twenty-eight companies reporting did not give information upon this point. It whould appear, therefore, that less than one-fifth of the farmers' mutuals limit the liability of the insured and that even a smaller proportion require a premium note. The prevailing plan is that of

unlimited liability, the obligation to pay his proper part of losses and expenses being assumed by the insured as a part of the insurance contract.

§ 8. Classification of property.

The returns from 334 of the companies indicated that they made a more or less elaborate classification of the risks insured, while 733 companies stated specifically that no classification at all was made by them. The remaining 94 companies returning questionnaires did not answer the question concerning classification. It may be added that proper classification for premium and assessment purposes has only recently begun to be considered seriously by these companies, and that a number of them have adopted a classification of their risks within the last year or two. This is especially true in the better developed rural sections of the country. Three main reasons may be given as to why the mutuals in these sections are adopting a classification of their risks. First, a demand for a closer approach to justice in the charges collected from the members, it being obviously unfair to apply the same rate of premiums or assessments to highly desirable risks as is applied to the more hazardous ones. To apply the same rate, for example, to a well constructed store or brick dwelling with slate or tile roof and provided with proper lightning protection, as is applied to an unrodded wooden barn, involves a very material discrimination against the better of the two risks. Secondly, it has been found that expediency as well as justice demands a reasonable classification of farm risks. Without such classification it is possible for a larger company that does classify or rate its risks, by means of a competitive offer, to take away from an all-one-rate local mutual the most desirable risks in its territory. This can be done, of course, even though the cost of insurance in the local mutual on its one and only class of property be much lower than the average cost on the same property in the larger competing company. Lastly it has been found that the recognition of certain loss-resisting features by means of suitable concessions in the classification and rates applied is one of the most practical ways of encouraging the general improvement of the risks within the business territory of the company.

§ 9. Method and cost of getting business.

The question of who looks after the matter of soliciting business was answered by 1,141 companies. Three hundred and sixteen companies stated that business was solicited by the directors only, 182 by officers only, and 82 by directors and officers.

Four hundred two companies reported solicitation by special agent only; 65 by directors and agents; 31 by officers and agents; and 16 by directors, officers, and agents. Forty-seven companies reported that no solicitation of business was done by any one, the company relying upon the initiative of those needing protection to apply for membership. Twenty

companies returning questionnaires gave no information on the method of getting business.

Since it is known that in many cases certain directors or officers are specifically designated agents for the solicitation of business it is probable that many companies reported securing business through special agents when as a matter of fact it would have been equally true to state that this service was performed by certain directors or officers. For this reason it is believed that the plan of securing business through responsible officials of the companies is even more common than the above figures would indicate. Many of the companies, it may be mentioned in this connection, pride themselves upon the fact that their history indicates a steady and healthy growth covering a number of decades and that every member of the company has been admitted as a result of a personal application on his part and without any effort or expense on the part of the company. While this passive attitude toward the growth of the company has worked exceedingly well in certain communities it is by no means universally applicable.

Only 232 companies reported making efforts to secure business through advertising, while 892 stated specifically that they did not advertise. Thirty-seven companies did not reply to the question. Of the companies resorting to advertising as a means of promoting the growth of the company, 112 reported the use of newspapers for this purpose. Forty-nine reported using special circulars only; and 42 reported using both newspapers and special circulars. Twenty-nine companies merely replied that they did some advertising without specifying the method employed.

Seven hundred twenty-two companies reported compensating their representatives for the solicitation of business by means of a fixed fee per application taken. The maximum of such fee reported by any company was $1 andthe minimum was 25 cents. The average fixed fee allowed was $1.28. Only 32 companies reported such fee in excess of $2, while 78 companies reported a fee of less than $1 Fifty-six companies paid both a fixed fee and a small commission based on the amount of insurance written, while 82 companies reported paying for service in soliciting business on a per diem basis. No information concerning the cost of getting business or the method used in compensating for this service was give by 170 companies.

One hundred thirty-one companies reported compensating their officials or agents for the solicitation of business strictly on a commission basis. The average commission allowed by these companies amounted to $0.027 per hundred per year of the insurance written. Only 18 companies allowed a commission equivalent to more than 5 cents per hundred per year, and 62 companies paid such commission equal to less than 2 cents per hundred per year.

The fixed fee plan of compensating solicitors of business in these companies may thus be said to be the current practice, being followed by more than three-fourths of the companies. This plan eliminates all temptation on the part of agents either to encourage or to permit overinsurance.

§ 10. Salaries of directors and officers.

More or less complete information concerning the compensation of directors and officers was given by 842 companies In the case of directors each of these companies reported the actual sum per diem allowed. The largest such sum was $10 and the smallest was 50 cents. Only 24 companies paid per diem more than $3, while 104 companies paid per diem less than $1.50. The average paid per diem by the 842 companies was $ 2.05. The most common amount paid was $2, nearly one-half of the companies reporting this figure.

The question referring to compensation of officers was less generally filled out than were the other parts of the questionnaire, and in view of the variation in the size of the companies, as well as of the different plans in vogue with regard to the distribution of duties among the officers, any figures in the way of averages would have but little significance. The prevailing plan of compensation for directors and officers of these organizations is that of a sum per diem for the directors and an annual salary for the officers charged with the routine work of the company.

§ 11. Adjustment of losses.

Information concerning the agency used in the adjustment of losses was furnished by 1,143 companies. Of these, 178 reported having a committee charged with this duty, while 119 reported employing special adjusters. In the case of 404 companies the adjustment of losses was left entirely to the directors while in the case of 97 companies one or more of the officers were charged with this duty The 345 other companies giving information on this point reported various combinations of the plans already given. So far as any plan can be spoken of as most common it is that of leaving the adjustment of losses to the directors, each acting for the company as a rule in his own neighbourhood. While this plan may be the cheapest, a greater uniformity in adjustments is doubtless secured by employing in so far as possible the same official or employee of the company for all adjustments.

Seven hundred and sixty-one companies reported providing in their bylaws for appeal to a special arbitration committee in the case of disagreement with the insured as to the indemnity due him. Sixty-eight companies reported that the insured had the privilege of an appeal to the board of directors in the case of such disagreement, and 76 other companies had various arrangements to cover cases of disputes with the insured in connection with the adjustment of losses. Twelve companies stated that no provision was made in their by-laws covering cases of disagreement, while 244 companies did not answer the question relating to this matter.

§ 12. Surplus and refunds.

The replies of 764 of the 1,091 companies which gave information concerning the policy of the company with regard to a reserve or surplus stated

that the company did not make any effort to keep on hand any surplus fund, and 57 companies simply reported a specific amount now on hand. Seventy-five companies made an effort to have on hand a surplus equal to a fixed percentage of the insurance in force, while 19 companies aimed to keep on hand a surplus based on the premium collected on policies then in force. The reports received from 176 companies indicated that they had "some" surplus on hand without either giving the amount of such surplus or stating the plan followed by the company with regard to the amount of such fund. The large majority of these companies, therefore, have no fixed plan with regard to reserve or surplus. The maintenance of a reasonable surplus appears to be favoured to an increasing extent, however, by the leading representatives of farmers' mutual insurance. A surplus amounting to $2,000 or $3,000 per million of insurance in force is generally considered to be sufficient for companies whose risks involve no conflagration hazard.

Only 648 companies gave replies to the question covering the policy of the company in respect to the return of excess premium deposits and only 37 of this number reported actually making any such refund to the policyholder, thus again indicating that the majority of these companies operate strictly on the assessment plan and collect from time to time from their members only such amounts as will suffice to pay losses and expenses.

§ 13. Reinsurance.

Eight hundred ninety-one of the 1,161 companies returning questionnaires gave replies to the question covering reinsurance. Of these only 67 reported having a part of their risks reinsured, while 824 companies stated specifically that none of their risks were reinsured. Suitable reinsurance facilities are among the great needs of many of these companies, a need that only recently has begun to be more generally recognized by them. In one State, namely Iowa, a special reinsurance company has been organized by the farmers' mutuals, and in Illinois the law was recently amended so as to permit these companies to place reinsurance with one another. Such privilege has for some time been granted by the laws of Wisconsin, Iowa, Missouri, Nebraska, Kansas, Kentucky and Colorado. The Minnesota law permits the companies to write joint or concurrent insurance in conjunction with other farmers' mutuals, on property situated outside the prescribed business territory. All State laws on this subject should permit the farmers' mutuals to reinsure a part of their larger risks with one another, and should also permit these companies to write policies of joint or concurrent insurance outside their special territory in order that they may be encouraged by one plan or another to avoid exposing themselves to excessive losses.

Conclusion.

The preceding summary, while pointing out the prevailing plans and practices among farmers' mutuals, also brings out clearly the variety in

such plans and practices. In 16 of the States, associations of mutuals have been organized. These associations hold either annual or biennial conventions at which the officers of the member companies have an opportunity to compare methods and discuss plans for the improvement of their organizations.

The National Association of Mutual Insurance Companies, which holds annual conventions, is in large measure composed of farmers' companies. These intercompany associations are a powerful influence tending towards the improvement and standardisation of the plans and practices of farmers' mutuals as well as of other mutuals that avail themselves of membership in them. While rigid uniformity may not be desirable, a reasonable approach to uniformity in the plans and practices of the farmers' mutual fire insurance companies, at least within a given State, would be a material advantage. The general public would be more easily convinced of the soundness and real value of these companies as a class. The approval and support of the insurance department of the State would be more easily secured than is sometimes the case under present conditions. Financial institutions which lend money to farmers would more readily accept the policies of these companies as collateral, and lastly the companies themselves would find it easier to co-operate with one another in matters of reinsurance or joint insurance, as well as in meeting other problems that arise.

Part III: Credit

UNITED STATES.

THE WORKING OF THE FEDERAL FARM LOAN SYSTEM.

SOURCES:

PUTNAM (George E.): "The Federal Farm Loan System," in *The American Economic Review*, Vol. IX, No. 1. Cambridge (Massachusetts), March 1919.

MCMAHON (John R.) in *The Country Gentleman*, Vol. LXXXIV, Nos. 9 and 11. Philadelphia, 1 and 15 March, 1919.

The Federal Farm Loan Act of 1916 was explained in our issue for December 1916 (1), and in our issue for November 1917 we gave some data as to the first year of the working of this Act (2). It is now possible to review more completely the establishment of the Federal Farm Loan System and the results to which it has attained. The system is without precedent in American economic history and has therefore the interest of an experiment.

§ 1. THE ORGANIZATION OF THE LAND BANKS AND FARM LOAN ASSOCIATION.

It will be remembered that the Federal Land Banks which were set up in each of twelve Land Banks Districts were intended to form merely the superstructure of the new organization and to come into touch with the farmer through National Farm Loan Associations. There was how-

(1) Pages 65-70.
(2) Pages 54-56.

ever a provision in the Act that if within one year of its passage no such association had been or was likely to be formed in a given locality, the Federal Farm Loan Board might appoint as its agents banks, trust companies, mortgage companies or savings institutions incorporated under State laws, through the medium of which a Land Bank could make long-term loans subject to the same conditions as the loans made through the associations.

The lending activities of the Federal Land Banks necessarily waited upon the formation of National Farm Loan Associations, which was impeded both by the usual individualism of farmers and by technical difficulties due to the unprecedented nature of the whole scheme. It was sought to overcome the first of these obstacles by means of a campaign of education, conducted through the newpapers, popular magazines, the Department of Agriculture and the publications of the Farm Loan Bureau.

The technical difficulties arose partly out of the indefiniteness of certain provisions of the Act. The Farm Loan Board had to settle the most desirable size of an association, the amount of its loans, the extent of territory it should cover, the pay to be received by the secretary-treasurer and members of a local loan committee, the charges for appraisal and determination of title. There were also questions as to what borrowers were eligible, the purposes for which loans might be made, the kind of land which might be accepted as security and the valuation which should be placed upon certain kinds of land. Rulings of the Board were that a farmer, able to borrow by means of the new system, is the man who conducts a farm and directs its entire operation, with or without hired labour, and that "he need not necessarily reside upon the farm mortgaged;" that "equipment," a purpose for which loans are authorized, includes "improvements needed in the conduct of a farm to facilitate its operation" and also "teams as well as machinery, tools and the like;" that "improvements" include "anything in the form of a beneficial structure"; and that it is unnecessary for borrowers to cultivate all the land mortgaged.

Another important question which had to be decided before Farm Loan Associations could become active was whether the laws of particular States as to foreclosure, homestead exemption, the conveying and recording of titles to land and kindred points were such as to afford sufficient protection to the holders of first mortgages. The laws of Louisiana and Texas were found to be not wholly satisfactory in this respect. In Louisiana the Board sanctioned loans only after the State law had been amended by a special session of the legislature. In Texas a law exempting homesteads from execution and mortgage was not regarded with favour, but loans were not entirely refused and a fairly large number of them were made.

The following table shows the number of Farm Loan Associations which have been formed and the business they have done from the time the first of them received a charter on 27 March 1917 until 1 November 1918.

TABLE I. — *The Farm Loan Associations 27 March 1917-1 November 1918.*

District	No. of associations 30 November 1917	Loans closed to 30 November 1917	No. of associations 1 November 1918	Total loans from time of organization to 1 November 1918		
				Applied for (1)	Approved	Closed
1. Springfield.	55	$ 708,455	111	$ 9,593,194	$ 7,111,195	$ 5,482,875
2. Baltimore .	77	1,599,900	128	9,545,672	7,591,865	5,441,950
3. Columbia . .	157	918,345	318	22,254,446	11,553,654	6,932,820
4. Louisville . .	194	1,782,300	265	19,713,829	13,962,100	8,897,900
5. New Orleans.	168	1,631,335	304	23,032,448	14,312,925	10,043,615
6. St. Louis . .	140	1,254,470	319	15,879,095	12,947,840	9,455,077
7. St. Paul. . .	126	4,418,100	416	33,163,700	22,950,350	19,773,300
8. Omaha . . .	79	1,787,490	265	25,197,870	20,767,710	15,642,740
9. Wichita , . .	344	7,390,900	381	21,644,651	17,349,500	15,017,000
10. Houston. .	153	1,145,345	275	26,718,019	26,366,135	12,528,379
11. Berkeley. . .	87	1,818,400	154	13,401,306	10,558,000	8,502,000
12. Spokane. . .	259	5,366,615	421	45,251,882	29,225,120	21,659,900
Total . . .	1,839	$ 29,624,655	3,358	$ 265,396,112	$ 194,696,424	$ 139,378,156

(1) Does not include cancelled and rejected applications.

In view of the difficulties which attended the formation of National Farm Loan Associations the progress made has been remarkable. In October 1918 loans amounting to $7,580,736 were made to 3,075 farmers, and these monthly figures are approximately typical. The total amount lent is indeed not great as compared with the total mortgage indebtedness of the United States; but it should be remembered that the work of organizing Farm Loan Associations has only begun and that the membership of those in existence may be expected to increase.

It is thought that the Act provided too many Land Bank Districts: in two cases it seems that the banks will have to continue to use government capital, and in these and two others the amount of the loans applied for has been small. It has become clear that the greatest demand for loans comes from the West and South, the comparatively new farming districts where high rates of interest have obtained. The St. Paul and Spokane districts, which embrace the North-Western States, lead all others as regards both the number of associations and the amount of the loans for which application has been made. Excluding Texas, which is a district by itself, more associations have been formed in North Dakota than in

any other State, and Washington is a close second. In District 6 — Illinois, Missouri and Arkansas — the demand for loans and the number of associations are greater, because the rate of interest is higher, in Arkansas than in Missouri or Illinois. The farmers of the West are not co-operators by taste and have in the past preferred to deal with institutions conducted for profit; but since little advantage has been taken of the clause in the Act which allows the appointment of agents, they have found themselves obliged either to form associations or to pay unnecessarily high interest on the sums they borrow. The failure to appoint agents is due to defects in the clause regarding them which render its operation impractical.

§ 2. The financing of the land banks.

In providing the machinery for keeping the banks supplied with a continuous flow of lendable funds, the Act assumed that as a bank invested its capital in mortgage loans it would pledge the mortgages as security for a bond issue and sell the bonds. This process involved however the locking up of a large portion of a bank's capital in farm loans at a time when mortgages were not yet available for bond issues, and the possibility that all the original capital of some banks might be exhausted before the bonds were issued. There was also a danger that these bonds, which constituted security of a type new in America, might not attract conservative investors.

The Farm Loan Board therefore arranged with a syndicate of bond houses that they would associate themselves with bond dealers in every Federal Land Bank District, purchase 40 per cent. of the bonds issued under the first agreement, and retail them at 101 1/8. The rate of interest borne by the bonds was 4 ½ per cent. They were drawn for a term of twenty years and might be called after the expiry of the first five. Under this agreement the syndicate bought about $25,000,000 of the bonds.

Since the rate of interest on Federal Farm Loan Bonds was 4 ½ per cent., it was necessary that the Land Banks should lend at not less than 5 nor more than 5 ½ per cent. Although it was known that, even if loans were made at the maximum rate, the full margin of 1 per cent. would not allow the Land Banks to meet their expenses in the first year, the borrower's rate was fixed at 5 per cent. At the same time the Board strongly advised that farmers should take their loans on mortgages for a period of thirty-six years. For at the outset it was expedient to fix a low rate of interest and keep the yearly charge of amortization low, in order to attract a sufficient number of borrowers. The short-term bonds were preferred as being, in view of the novel character of the investment, more attractive to investors. They might be converted into 4 or 3 ½ per cent. bonds if they were called in before maturity; or if a large number of them were allowed to mature the unpaid portion of their principal at the end of twenty years would be available as security for new bonds, bearing a lower rate of interest, from the proceeds of which all obligations would be promptly met.

The entrance of the United States into the European War greatly affected the Board's policy. Between the issue of the first and the second Liberty Loans no difficulty was experienced in marketing nearly $30,000,000 of farm loan bonds at a premium. But the absorption by the government of nearly six thousand million dollars of capital within six months and the rapid rise in rates of interest made it clear that even if the premium on Farm Loan Bonds were reduced they could not be marketed in the amount or with the promptness required. Not only had the normal need for farm loans to be supplied, but there was a stimulated demand due to war prices and to the fact that farmers were being urged to make their land more productive.

The Farm Loan Board raised the rate of interest on mortgages to 5 ½ per cent. as from 6 December 1917. Then, on 18 January 1918, it obtained from Congress an amendment of the law which authorized the Secretary of the Treasury to purchase Farm Loan Bonds at par and accrued interest to an amount not exceeding $100,000,000 in the fiscal years ending on 30 June 1912 and 30 June 1919, these bonds to be subject to redemption or sale by the Land Banks at the same price. Thus the Land Banks were enabled to continue to grant loans to an essential war industry without interfering with the sale of Liberty Bonds. In May 1918 the rate of interest on Farm Loan Bonds was increased to 5 per cent.

On 1 December 1918 the total amount of the outstanding Federal Farm Loan Bonds was $140,500,000, distributed as follows:

TABLE II. — *Federal Farm Loan Bonds 1 December 1918.*

Land Bank of	Bearing interest at rate of		Total
	4 ½ per cent.	5 per cent.	
1. Springfield	$ 1,750,000	$ 3,250,000	$ 5,000,000
2. Baltimore	2,750,000	2,500,000	5,250,000
3. Columbia	3,000,000	3,500,000	6,500,000
4. Louisville	4,750,000	4,250,000	9,000,000
5. New Orleans	5,750,000	5,000,000	10,750,000
6. St. Louis	4,500,000	6,500,000	11 000,000
9. St. Paul	14,500,000	5,750,000	20,250,000
8. Omaho	11,000,000	3,250,000	14,250,000
9. Wichita	10,750,000	3,500,000	14,250,000
10. Houston	7,250,000	5,750,000	13,000,000
11. Berkeley	5,250,000	2,750,000	8,000,000
12. Spokane	13,750,000	9,500,000	23,250,000
Total	$ 85,000,000	$ 55,500,000	$ 140,500,000

Bonds bought by Treasury under authority of 18 January 1918	$	67,660,000
Bonds repurchased and sold at a premium by the Land Banks (5 per cent.)	»	11,690,000
Bonds purchased and held by the Treasury (4 ½ per cent.)	$	55,970,000

The original Act provided that as soon as the subscriptions of National Farm Loan Associations to the stock of any Land Bank had reached the sum of $100,000 that is when a Land Bank had made loans to the amount of $2,000,000, the number of Land Bank directors would be increased from five to nine, of whom six would be representatives of the National Farm Loan Associations. It also provided that a Land Bank should, after $750,000 of its stock had been subscribed by a Farm Loan Association, begin to retire the shares subscribed by the government and the public by applying, twice a year, 25 per cent. of all sums thereafter subscribed to the retirement of the original stock. In accordance with this latter provision two banks, those of Spokane and St. Paul, retired government stock in November 1918 and two others, those of Omaha and Wichita, were expected to do so in May 1919. Nevertheless none of the Land Banks has been organized on a permanent basis. The Farm Loan Board judged that the government should continue to nominate a majority of the Land Bank directors while it remained the largest stockholder, and a provision to this effect was included in the amendment of 18 January 1919.

Thus far none of the Land Banks has paid dividends, although the four named in the last paragraph are accumulating surpluses and hope soon to do so. The business of the other banks has been too small to make up for the initial drain on their capital. They have been obliged to wait upon the formation of Farm Loan Associations, and their customers have included many borrowers of small sums whose titles have been as expensive to determine as though they had taken large loans. With a view to increasing the net earning powers of the less prosperous banks, the Board has suggested to Congress that the maximum loan authorized by the Act be increased from $10,000 to $25,000.

§ 3. The joint stock land banks in the new system.

In the article in our issue for December 1916 (1) we explained the terms on which Joint Stock Land Banks could make farm loans, secured by mortgages, under the Act.

No Joint Stock Land Bank was brought under the Act for nearly a year after its passage. Certain "rural credit associations" were indeed formed in the South and West and it was represented that they would eventually receive federal charters. But some of them were clearly fraudulent, and for the protection of the stockholders the Board intervened

(1) Pages 69 and 70

with a ruling that no charter would be granted to any Joint Stock Land Bank if its promotion had involved expense.

Almost as soon as the Federal Land Banks were ready to begin business a few Joint Stock Land Banks were organized. But their progress was slow. On 1 November 1918 only nine of these banks had been organized, and five of them had issued bonds aggregating $6,875,000. The rate of interest on the bonds was 4 ½ per cent. in one case, 5 per cent. in the others. One of the banks had a capital of $1,125,000, another a capital of $375,000, each of the seven others a capital of $250,000. Only four of these banks were engaged in the business of negotiating farm mortgages before they were organized as federal corporations, and two are operated by the same group of mortgage bankers. Manifestly farm mortgage companies have been reluctant to change their form of organization and their methods, or to incur the restrictions imposed by the new system. They have already perfected an organization in a carefully selected territory, extending over several States, in which they have the goodwill of a large and dependable clientele, and can conduct a large and fairly profitable business with a very small amount of capital. They have been little affected by the Federal Land Banks, which are chiefly active in the new agricultural districts while their business is mainly confined to the districts which are most developed agriculturally. Where they compete with the Federal Land Banks the lower rate of interest on loans charged by these latter is outbalanced by the fact that the farmer who borrows from a mortgage company knows the approximate cost of his loan from the first and can repay the principal in whole or part before the expiry of five years, and that his loan is closed very soon after he has applied for it.

The bankers lending on farm mortgages have however been aroused by the steady growth in the number of Farm Loan Associations. They have formulated, in a series of conferences held between October 1917 and January 1918, certain amendments which would enable them to enter the new system and compete with the Federal Land Banks on more advantageous terms. They ask that a Joint Stock Land Bank be allowed: (1) to make mortgage loans in all parts of the continental United States; (2) to issue farm loan bonds up to twenty (instead of fifteen, as at present) times the amount of its capital and surplus; (3) to make loans at a maximum rate of 6 ½ per cent.; (4) to sell mortgages without recourse when these are not to be security for bond issues; (5) to make short-term loans and single payment loans or loans payable in instalments; (6) to invest a portion of its funds in municipal bonds and other securities to be approved by the Board; (7) to substitute in the corporate name the word "national" for the words "joint stock" which are not well understood in America; (8) to go into voluntary liquidation. It is also proposed that the provisions of the law relating to Joint Stock Land Banks be brought together into one complete section, entirely independent of the sections pertaining to Federal Land Banks.

If these amendments are approved, it is not unlikely that Joint

Stock Land Banks would conduct most of the farm mortgage business of the Middle West.

§ 4. Conclusions.

The purpose of the Federal Farm Loan Act was in the first place to improve the method of making loans, secondly to bring the cost of borrowing on farm mortgages to approximate equality throughout the United States.

The working of the system has proved the advantages of long-term loans repayable by amortization and the advantages of mobilizing capital by selling bonds issued on the collective security of farm mortgages. Capital has been brought from investing centres to farms. In the old agricultural States no great economy has been effected, but in districts where the rate of interest on loans used to vary from 8 to 10 per cent. the cost of borrowing has been sensibly reduced and the demand for loans much stimulated.

The Federal Land Banks have done most business in the States which previously were not attractive to private capital, as appears from the following figures which show the position on 1 November 1918:

	Percentage of total Federal Farm Loans	Percentage of total mortgage debt of country
Southern States (incl. S. Atlantic division) .	32.5	16.1
Mountain States	12.7	2.8
Pacific Coast division.	12.7	5.6
West North Central States	29.05	38.2
East North Central States	8.4	26.2
New England and Middle Atlantic divisions .	4.5	10.9

The usefulness of the Farm Loan Association as a principal source of credit under the new system is questioned. Even if dividends were paid on the stock of the Federal Land Banks it is not likely that the borrower would receive dividends on the stock of his association and at the same time be exempt from the payment of assessments. The borrower is indeed relieved from the necessity of paying commissions in advance, but, on the other hand, he is obliged to subscribe for stock out of his loan without immediate prospect of the repayment of his subscription, a charge equal to a flat commission of 5 per cent., payable in advance. There is necessarily a long interval between the application for and the conclusion of a loan. The association has to be organized; current business has to be transacted; the loan has to be closed by a complex operation perplexing to those not accustomed to credit business. While some associations pay officials they do not give salaries sufficient to secure the accuracy and dispatch which often distinguish the business of private firms. Finally, there is a tendency

among the members of Farm Loan Associations to lose interest in their association when once they have secured their own loans.

Mr. George E. Putnam of Washington University, our chief authority for the foregoing remarks, states that " it is still too early to pronounce the Federal Farm Loan System either a success or a failure. In the light of its slow progress and meagre accomplishments, one would hesitate to call it a distinct success. But its record thus far cannot be made the basis for estimating its future worth. The system is still in the organization stage. If it proves to be unsuccessful, it is not likely to be abandoned but rather to be modified to suit American needs. For the time being, however, it is certain that a much greater measure of success could be assured if co-operation were made entirely voluntary and borrowers were permitted to resort to the method of individual contract in obtaining loans. With most of them the individualistic instinct is deep rooted, and it will require something more than mere legislation to make them co-operative at heart ".

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES

CHILE.

THE SAVINGS-BANKS OF CHILE IN 1918 — *La Información*, year IV, No. 35. Santiago del Chile, February 1919.

From the balance-sheets which the two savings-banks of Chile — the National Savings-Bank and the Savings-Bank of Santiago — showed at the end of 1918 we learn the great development to which these two institutions have attained in a few years, a development which has on other occasions occupied our attention in this review (1).

The figures referring to 1917 show a noteworthy increase since 1916 and are surpassed by many millions by those of 1918, all of which points to a very marked increase to be realized in 1919.

This great development of the business of these two banks is due not only to the habit of saving which the Chilean population has little by little acquired, but also and principally to the absolute confidence these banks have been able to inspire, offering as they do a very safe and sound form of investment to the country's capital.

The National Savings-Bank, which had 62 branches at the end of 1917, had yet others in 1918, namely the branches of Chiquicamata, Chimbarongo, Santa Cruz, Coronel, Loto, Lebu, Turanilahue, Collipulli and Rio Bueno.

In 1918 deposits reached the sum of 124,448,268 pesos and savings-

(1) See our issues for March and April 1913 and April 1917.

bank books numbered 586,238. These figures are compared in the following table to the corresponding figures for the three preceding years.

TABLE I. *Position of Deposit-Books of the National Savings-Bank from* 1915 *to* 1918.

On 31 December	Books	Deposits — pesos
1915	426,948	72,202,028
1916	476,667	85,127,976
1917	533,628	97,957,800
1918	586,238	124 448 260

As we see in this table, the number of books and the total amount of deposits have both sensibly increased from 1915 onwards. The percentage which the increase of deposits in each year formed of the total amount at the end of the preceding year was 17 in 1916, 15 in 1917 and 27 in 1918.

We should recall the fact that the National Savings-Bank assumed a large development from the time of its foundation. Instituted in 1910 by the law of 10 August of that year, it is directed by the council of the Mortgage Credit Bank but is autonomous as regards its entire individual management and the organization of its services. In 1911 it formed 18 central banks and 10 branches, and the latter had in 1918 reached the number of 71. Contributions to the increase of deposits in this last year which, as we saw in Table 1, reached twenty-six and a half millions, were received from the bank of the province of Valparaiso (11, 745,000 pesos), the banks of the province of Concepción (3,363,000 pesos), the banks of the province of Iquique (about 2,000,000 pesos), and the banks of Antofagasta (about 1,500,000 pesos).

The number of cheques payable at sight was 106, 409 and they amounted to 179,567,559 pesos, the corresponding figures for 1917 being 147,583 cheques for 135,190,869 pesos. There was thus an increase of 48,826 cheques and 44,376,690 pesos. Similarly in 1918 the number of telegraphic money-orders was 22,063 and their value 10,542,765 pesos, while in 1917 their number was 11,838 and their value 9,779,164 pesos, the increase being therefore one of 10,225 orders and 763,600 pesos.

The securities held by the bank at the end of 1918 were made up of bonds of the effective value of 94,415,978 pesos, of which sum 89,681,296 pesos represented bonds of the Mortgage Credit Bank and the remainder other State guaranteed bonds. It is worth while to notice the increase in these bonds in the last four years, an increase shown by the following figures:

Year	Effective value of bonds
1915	60,685,964 pesos
1916	70,141,921 »
1917	79,561,520 »
1918	94,415,938 »

At the date of its balance-sheet the bank held depositors' bonds of the value of 10,074,300 pesos, a sum which should be added to deposits in order to arrive at the total amount of the savings lying in the bank on 31 December 1918.

TABLE II. — *Position of Deposits.*

On 31 December	Effective value of deposited bonds — pesos	Deposits — pesos	Total — pesos
1915	7,894,832	72,202,028	80,096,861
1916	9,960,209	85,127,976	95,088,185
1917	11,970,874	97,957,800	109,928,674
1918	10,074,300	124,448,260	134,522,561

It should also be noticed that in the year we are examining 2,148 money boxes were sold for 10,740 pesos and 887,026 stamps for 191,835 pesos. Both these items represent small savings, and devices very favourably received by the public, and are constantly further developed, especially among the working class.

The sums deposited on holidays amounted to 6,509,790 pesos in 1918, or to 2,000,000 pesos more than in 1917. Since the increased deposits on holidays were received by the Taltal, Almendral (in the port of Valparaiso) and Calamo branches, which usually are not very busy, there is proof that there are places in which the step of keeping the banks open on holidays gives excellent results.

The Savings-Bank of Santiago had 20 branches at the end of 1918, two of which were additional since the previous year, having been instituted at Matadero and Avenida de Matto. The increase in the number of books and the amount of deposits, as compared with that in the three previous years, is shown in the table we reproduce.

TABLE III. — *Position of Savings-Bank Books and Deposits of the Savings-Bank of Santiago from* 1915 *to* 1918.

On 31 December	Books —	Deposits — pesos
1915	177,481	289,991,535
1916	199,126	330,060,821
1917	235,997	388,810,034
1918	262,607	537,764,076

As this table shows, both the number of books and the amount of deposits steadily increased from 1915 to 1918. The percentage which the increase in each year formed of the total amount at the end of the previous year was 14 in 1916, about 18 in 1917 and 38 in 1918.

The effective value of the bonds making up the securities held by the bank was 32,939.356 pesos, of which sum 31,813,766 pesos represented the bonds of the Mortgage Credit Bank and the remainder other State guaranteed bonds. We will show the increase in these bonds, represented by the following figures :

Year	Effective value of bonds
1915	22,599,952
1916	23,277,112
1917	28,796,032
1918	32,939,356

At the end of 1918 the bank held depositors' bonds of the effective value of 9,265,657 pesos, a sum which, when added to the sum of deposits, gives the total amount of the savings lying in the bank during the year.

TABLE IV. — *Position of Deposits.*

On 31 December	Effective value of deposited bonds	Deposits	Total
	pesos	pesos	pesos
1915	62,208,465	28,991,535	35,200,000
1916	64,439,175	33,060,825	39,500,600
1917	96 615,977	38,810,034	48,426,011
1918	92,265,657	53,764,076	63,029,733

The sums deposited on holidays amounted to 2,885,773 pesos, to which the central office contributed 538,339 pesos, the Bellavista branch 407,066 pesos, the Matadero branch 406,813 pesos.

On the basis of these data, the whole comparative position of the two banks at the end of 1918 and at the end of 1917 can be resumed as follows :

TABLE V. — *General Position of the Two Banks at the End of* 1917 *and of* 1918.

Year	Branches	Savings bank books	Cash deposits	Depositors' bonds Effective value	Bonds held as securities
			pesos	pesos	pesos
1917	80	769,625	136,767,834	21,586,850	108,357,552
1918	91	848,845	178,212,336	19,339,957	127,355,294

GREAT BRITAIN AND IRELAND.

1. THE LOAN FUND SYSTEM IN IRELAND. — *Annual General Reports of the Department of Agriculture and Technical Instruction for Ireland*, 1915-16, 1916-17, 1917-18. Dublin, 1917, 1918, 1919.

In accordance with a recommendation made by the Departmental Committee on Agricultural Credit in Ireland, the powers and duties previously exercised by the Loan Fund Board for Ireland were transferred to the Department of Agriculture and Technical Instruction for Ireland at the end of 1915, since which time the various loan fund societies have carried on their operations under the supervision of the Department.

In the article entitled "The Sources of Rural Credit in Ireland" which appeared in our issue of February 1915, will be found an account of the origin and working of the loan fund societies, together with a statement of the many defects in the system which were noted by the Departmental Committee on Agricultural Credit. Owing to the pressure of work in other directions arising from the war, the Department of Agriculture have not yet been able to give full consideration to the various recommendations made by the Departmental Committee. Amongst the most important improvements required are the extension of the period for which loans may be granted and the increase of the maximum amount of loan. At present the maximum sum which may be lent by a society is £10, an amount which is insufficient, as a rule, to meet the special requirements of agricultural borrowers.

Early in the spring of 1917 the Department communicated with the societies, pointing out the desirability of steps being taken to ensure that the funds at their disposal should be utilized, as far as possible, during the sowing season for the making of advances to deserving borrowers of the agricultural class, especially labourers, allotment holders and small farmers, for the purchase of seeds, manures, implements, etc. Many of the societies took steps, by the issue of handbills and posters or otherwise, to ensure that the facilities offered by the societies for the making of small loans should be made as widely known as possible within the area of the society's operations. In many cases, however, owing to the high prices obtainable for agricultural produce, farmers and agricultural labourers did not find it necessary to obtain loans, as in pre-war years, with the result that the lending operations of the societies continued to show a decline. It is hoped that there will be a considerable development when peace conditions are restored, especially if the needed improvements in the system can be brought about.

The following table shows the amount and number of loans granted by the loan fund societies since 1910:

Loans granted by Loan Fund Societies 1910 to 1917.

Year	Amount of Loans Granted	Number of Loan Granted	Total Net Profit
	£		£
1910	196,898	39,650	932
1911	194,992	33,858	1,052
1912	190,816	32,946	997
1913	184,628	31,229	959
1914	179,535	30,037	875
1915	168,987	27,768	871
1916	157,736	25,681	655
1917	154,611	24,051	789

The following figures show the working of the loan fund societies in 1917:

Number of societies actively operating		48
Number of societies being wound up		11
Total capital on 31 December 1917	£	82,377
Working capital on 31 December 1917	»	67,005
Total amount of loans granted	»	154,611
Number of loans granted		24,051
Loans outstanding on 31 December 1917 (exclusive of irrecoverable debts)	£	59,501
Sum in treasurers' hands on 31 December 1917	»	5,464
Amount received for discount, interest, fines, etc.	»	5,306
Total paid as salaries	»	3,199
Number of paid officials employed	»	95
Total expenses of management, including salaries, rents, etc.	»	4,146
Amount of interest paid or due by societies using capital secured by debentures	»	1,001
Net Loss (18 societies)	»	307
Net Profit (30 societies)	»	789

2 LOANS FOR AGRICULTURAL PURPOSES GRANTED BY THE DEPARTMENT OF AGRICULTURE FOR IRELAND. — *Annual General Report of the Department of Agriculture and Technical Instruction for Ireland*, 1917-18.

Prior to the outbreak of the European War, the Department of Agriculture for Ireland had put in operation a number of schemes for making loans for agricultural purposes. Some of these it was necessary to suspend, but the Department continued during the war to grant loans for the purchase of bulls, stallions and agricultural implements.

The following table shows the number and amount of loans granted for the purchase of bulls in each of the years from 1914 to 1918:

Year	Number of Loans	Amount of Loans £
1914	211	5,355
1915	132	3,597
1916	134	3,967
1917	116	4,503
1918	92	3,942

The loans granted in 1918 were utilised in the purchase of bulls of the various breeds as follows: Shorthorns, 48: Aberdeen Angus, 26; Herefords, 10; Registered Dairy, 5; Galloways, 3.

For the purchase of stallions, not only are loans granted, but subsidies also are given. The following table shows the number of loans and subsidies granted for this purpose in each year from 1914 to 1918:

Year	Number of Loans	Number of Subsidies
1914	24	18
1915	20	12
1916	21	15
1917	5	4
1918	11	8

During 1918 one loan and one subsidy were given for the purchase of thorough bred stallions; two loans and two subsidies for the purchase of half-bred stallions: four loans and one subsidy for the purchase of Clydesdale stallions and four loans and four subsidies for the purchase of Irish draught stallions. The total amount of the loans in 1918 was £675 and of the subsidies £410.

Of the loans for the purchase of agricultural implements advantage was largely taken in 1916-17 and 1917-18. The number and amount of loans issued in each year from 1913-14 to 1917-18 are shown in the following table:

Year	Number of Loans	Amount of Loans £
1913-14	482	4,840
1914-15	105	1,106
1915-16	258	4,973
1916-17	3,354	84,449
1917-18	3,014	87,412

The total value of the machinery purchased in 1917-18 with the aid of such loans was £109,264. The largest items in point of value were: Motor-tractors, £33,355; power threshers £20,321; mowers and reapers, £11,574; binders, £9,896. In respect of the number of machines purchased, the largest items were: Ploughs, 647; mowers and reapers, 534; knapsack sprayers, 495; harrows, 321.

UNION OF SOUTH AFRICA.

THE LAND AND AGRICULTURAL BANK OF SOUTH AFRICA. — From the *Report for the Year ended 31st December*, 1918, issued by this bank. Cape Town, 1919.

In the year 1918 the Land and Agricultural Bank of South Africa received applications for ordinary advances amount to £1,524,739. These figures show an increase over the applications received in the previous year, but they do not yet reach the pre-war level. In 1913, the applications numbered 3,889 and amounted to £2,706,994, but in 1914 and 1915 the bank had to cease the granting of advances owing to the necessity of conserving the financial resources of the Union. In 1914 the applications received were 1,268 for £451,329; in 1915, they were 401 for £176,354. Since 1915 the Bank has gradually resumed operations and the applications have steadily increased. In 1916 they were 2,022 for £1,039,496 and in 1917 they were 2,299 for £1,467,758.

The advances actually made in 1918 numbered 1,699 and amounted to £948,345, making an average of £558 per advance. The purposes for which the advances were made, and the amount of the advances for each purpose were as follows: Improvements, £51,574; purchase of stock, £62,832; discharge of existing liabilities, £420,805; sub-division of land, £390; part purchase of land, £412,744. According to provinces, the advances were thus divided: Transvaal Province, 1,096 advances, £461,045; Orange Free State Province, 287 advances, £245,495; Natal Province, 149 advances, £112,500; Cape Province, 167 advances, £129,305.

The increase in the cost of fencing material has caused a continuous reduction since 1913 in the applications for loans for putting up fencing. In 1913 they numbered 906 and amounted to £132,988; in 1918 there were only 29 applications, amounting to £4,312. Of the applications received in 1918, 22 amounting to £2,880 were approved; they related to 57.2 miles of fencing, the average advance being £50 per mile. During the year fencing advances amounting to £6,120 were paid out.

The construction of dipping tanks with the aid of loans from the Land and Agricultural Bank was still steadily proceeding, but in many cases there was delay owing to the difficulty of procuring cement. In 1918 applications were received for 111 advances amounting to £11,142. Of these, 88 totalling £8,790 were approved. During the year £18,992 was paid out in respect of dipping tank advances, which includes £5,000 paid to the Native Affairs Department for the erection of tanks in native areas.

As a temporary measure for the relief of the distress caused by the severe droughts which occurred in 1915 and 1916, advances were granted on second mortgages under Act No. 30 of 1916 and against personal security for the purchase of stock under Act No. 28 of 1916.

In all, £13,150 was advanced on second mortgage to 41 applicants. By the end of 1918, eighteen of these advances, amounting to £4,900

had been paid off in full, while the remaining 23 had been reduced by £3,434, leaving £4,815 of the original loans outstanding.

On personal security loans amounting to £50,538 were made to 293 farmers. During 1917 borrowers repaid £1,535 and during 1918 a further £23,471, thus reducing the capital debt to £25,460. Some of the loans made proved of striking benefit to the borrowers. One borrower purchased 313 ewes in May 1917 for £299; in June 1918, the flock had increased to 709, which realised £714. Another purchased 201 ewes in May 1917 for £199; he sold out in June 1918 at a profit of roughly £500.

Considerable advances are made by the Bank to co-operative societies. During the year 1918 societies applied for advances totalling £234,000, of which £233,300 was granted. The loans to societies which remained outstanding at the end of the year amounted to £499,856.

Part IV: Agricultural Economy in General

AUSTRALIA.

LAND SETTLEMENT IN NEW SOUTH WALES.

OFFICIAL SOURCE:

THE OFFICIAL YEAR BOOK OF NEW SOUTH WALES, 1917 Sydney, 1918

In our issues for March and August 1913 (1) we explained the conditions of land settlement in New South Wales down to 1911 and in our issue for April 1917 we gave some figures as to land settlement there in 1915-16 (2). We propose now to complete this information and to bring it down to the year 1917.

The total area of New South Wales is about 310,372 square miles or 198,638,080 acres. When the surface covered by rivers and lakes is deducted there remain 305,733 square miles or 195,669,000 acres, of which 576,000 acres at Yass-Canberra were transferred in 1911 and 17,920 acres at Jervis Bay in 1915 to the Commonwealth Government as Federal Capital Territory. The land surface of the State was thus reduced to 195,075,080 acres. This area is distributed as follows:

Area alienated from the Crown	41,549,337
Area conditionally purchased	18,693,429
Leasehold area which may be converted to freehold	21,124,423
Total area practically beyond State control .	81,367,189
Area held on long leases	77,160,169
Total area not available for settlement . . .	158,527,358
Total unsettled area	36,547,722
	195,075,080

(1) See our issues (*Monthly Bulletin of Economic and Social Intelligence*) for March 1913, page 105, and August 1913, page 137.

(2) See our issue for April 1917, page 100.

But from the 36,547,722 acres which are not yet settled three or four million acres must be deducted to allow for roads and useless land. The area which remains to be occupied measures, therefore, some 32,000,000 acres.

§ 1. Land beyond State control.

A. *Area Alienated from the Crown.*

From the earliest days of settlement until 1861 the Crown disposed of land only by granting or selling it, the price varing from 5*s* to 20*s*. an acre. After 1861 the systems of acquiring and holding land became more various but sales by auction and private treaty continued to take place. At present no more than 200,000 acres may be sold by auction in any one year. Country lands may not be offered for sale in areas exceding 640 acres — a provision which encourages closer settlement; and their upset price may not be less than 15*s*. an acre. A system is provided by which 25 per cent of the price may be paid at the time of purchase, and the remainder in instalments spread over not more than five years, interest at the rate of 5 per cent. being due on the portion not yet paid.

Land is also alienated from the Crown in New South Wales by a second method, that of leases in perpetuity. Such leases of land known as *homestead selections*, which matured into *homestead grants*, were made under the Crown Lands Act of 1895; but by the Crown Lands Act of 1912 were superseded by others which create the perpetual leaseholds of a slightly different form called *homestead farms*.

The grant of the perpetual lease of a homestead farm is acquired by the tenant five years after he has made his application therefor, if he have meanwhile complied with the required conditions. The annual rent is 2 ½ per cent. of the capital value of the land, but for the first five years the holder may, in lieu of paying rent, annually spend a sum equal to 2 ½ per cent. of the capital value of his land on permanent improvements additional to those otherwise required of him. The capital value is subject to reappraisement after twenty-five years and after each subsequent period of twenty-five years. A holder must reside for five years on his homestead farm or, in special cases, within reasonable working distance thereof. Where, however, the unimproved value of the land does not exceed £300, the Minister may allow improvements effected to exempt from this obligation of residence.

Lands held by other tenures may be converted into homestead farms.

On 30 June 1917 there were in existence 3,585 homestead selections and grants having a total area of 1,256,036 acres.

As regards the more modern homestead farms, the following table shows the extent to which they have been constituted since the Act governing them was passed.

TABLE I. — *Formation of Homestead Farms* 1912-1917.

Year ending 30 June	Applications for farms accepted		Created by conversion from other tenures		Reversal of forfeitures and increase of area		Less— Forfeitures and decrease of area		Homestead farms in existence	
	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
		acres		acres		acres		acres		acres
1912..	46	27,815	—	—	—	—	—	—	46	27,815
1913..	356	203,365	19	10,041	—	—	—	—	421	241,221
1914..	358	221,576	9	7,337	—	—	32	19,635	756	450,499
1915..	437	327,098	11	4,550	1	210	50	33,439	1,155	748,918
1916..	348	252,166	6	3,848	—	—	57	35,479	1,452	969,453
1917..	(1) 167	(1) 115,259	2	1,209	2	486	75	49,722	(1) 1,548	(1) 1,036,685

(1) Includes 82 farms of 61,476 acres for returned soldiers (*vide infra*)

B. *Area conditionally purchased.*

Certain lands in the Eastern and Central Divisions of the State, that is in its less exclusively pastoral districts, are held on so-called conditional purchase. In other words, they are granted on lease to a holder who has the right to buy them if he fulfil certain conditions. These conditions may or may not include an obligation to live on the land, but do so in the great majority of instances and in the case of by far the larger area of land. The two forms of tenure are known as "residential conditional purchase" and "non-residential conditional purchase".

Applications for conditional purchase must be lodged with the Crown Lands Agent of the district in which the land in question is situated, at least one tenth of the surveying fee being paid at the same time, together with a deposit of 5 per cent. of the capital value of the land in the case of a residential conditional purchase and double that amount in the case of a non-residential conditional purchase.

The Land Board then causes the land to be surveyed and a report to be supplied by the surveyor, and subsequently either refuses the application, or accepts it, granting a certificate to the applicant in the latter case. The statutory price of ordinary Crown lands is £1 an acre to residential and double that amount to non-residential conditional purchasers, but in special cases these prices may vary.

A residential conditional purchaser normally pays the balance of the purchase-price of his land in twenty-seven annual instalments of 1s per acre and a final lesser instalment. In some cases the annual instalments may be reduced to 9*d.* an acre and the period of payment is then about forty-one years. The first annual instalment is due three years after the date of the contract. Interest is paid on the balance of the purchase price at the rate of 2 ½ per cent. per annum. The land must be continuously occupied by the purchaser for five years, beginning three months after his application has been accepted. The Minister of Lands may al-

low improvements effected on land to carry an exemption from the obligation to reside thereon, where the unimproved value of the land is not greater than £300. The purchaser must fence his land within three years of the acceptance of his application; or he may substitute for fencing permanent improvements which must at certain dates attain to certain specified values.

A non-residential conditional purchaser also pays the balance of the price of his land by instalments and interest on this balance at the rate of 2 ½ per cent. per annum. He must fence his land within a year of the acceptance of his application, and within five years thereof must effect improvements of the value of £1 an acre. Improvements of the value of 30s. an acre, effected within five years of the acceptance of the application, may be substituted for fencing. He may convert his holding into a residential conditional purchase.

The minimum area which may be acquired by conditional purchase is 40 acres. The maximum is in the case of residential conditional purchase 1,280 acres in the Eastern and 2,560 acres in the Central Division, in the case of non-residential conditional purchase 320 acres in both divisions. Since 1908, however, it has been possible for a conditional purchaser to acquire additional holdings, not necessarily adjacent to his original holding, and on the same conditions as his original holding saving that he naturally is not expected to reside in more than one place. The aggregate area in his tenure must not exceed that sufficient for the maintenance of an average family in average seasons and circumstances.

Under certain conditions, a conditional purchase, whether residential or not, may be converted into a homestead farm; and other forms of tenure may be converted into conditional purchases.

The following table shows the applications for land as conditional purchase from 1908 to 1917.

TABLE II. — *Applications for Land as Conditional Purchase* 1908-1917.

Year ended 30 June	Original Residential Conditional Purchases		Additional Conditional Purchases		Non-Residential Conditional Purchases		Conversion into Conditional Purchases		Total	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
		acres		acres		acres		acres		acres
1908	1,618	229,044	2,108	486,491	113	16,370	11	2,220	3,850	734,125
1909	1,641	285,616	2,767	797,666	121	18,791	12	3,324	4,541	1,105,307
1910	1,206	184,097	1,001	150,074	57	8,196	22	8,357	2,286	350,724
1911	801	116 177	752	98,813	49	6,547	147	43,934	1,749	265,471
1912	584	99,604	626	84,397	48	6,768	122	39,296	1,380	230,265
1913	347	47,427	403	53,274	33	3,143	41	17,904	824	121,748
1914	250	31,543	236	31,525	26	2,338	47	27,649	559	92,955
1915	181	20,794	166	24,357	15	1,024	46	27,453	408	73,628
1916	115	11,770	97	10,387	4	338	76	47,143	295	69,638
1917	85	13,392	73	11,659	10	710	59	38,046	227	63,807

C. *Leasehold Area which may be Converted to Freehold.*

Of the 21,124,423 acres of leasehold area in the State which can be converted to freehold, 15,269,512 acres or more than five sevenths are held by the tenure known as *conditional lease.* A lease of this form may be obtained by any holder of a residential conditional purchase; but the land thus granted must not be more than three times the area of the conditional purchase in virtue of which it is granted. The conditions with regard to fencing and improvements are those which apply to conditional purchases. The lease is for forty years, and the rent, which is determined by the Land Board, is payable annually and in advance. The lease may be converted into conditional purchase with respect either to the entire holding or to a part thereof not less than 40 acres in area.

In 1916-17 the applications for conditional leases numbered 127 and covered an area of 32,599 acres, and 85 applications covering 17,471 acres, including some applications outstanding since the previous year, were granted. An area of 145,129 acres was made conditional leasehold by conversion, and 1105 conditional leases, covering 538,629 acres, were converted into conditional purchases.

The so-called *conditional purchase leases* differ slightly in form from conditional leases. Lands are no longer available for being granted by these leases under which 457,173 acres are held.

Settlement leases, under which more than four million acres are still held, have also ceased almost entirely to be granted since the Act of 1912 introduced Crown leases (*vide infra*). Farms gazetted as being available for tenure by settlement leases were obtainable on application, the applicant depositing six months' rent and the full surveying fee. The maximum area which can thus be held is 1,280 acres or 10,240 acres if the settler combines grazing with agriculture. He may also hold other land within a reasonable working distance of his settlement leasehold. The lease is for forty years. Residence was compulsory for the whole period until the Crown Lands Amendment Act of 1917 reduced the term of obligatory residence to five years. This Act also enacted that the land must be fenced within the first five years and noxious weeds and animals removed within eleven years.

At any time after the first five years the lessee may apply for a homestead grant of an area not exceeding 1280 acres on which his house is situated; and under the Act of 1908 he may, on certain conditions, convert his settlement lease into a conditional purchase or a conditional purchase and conditional lease. But the area thus converted must not exceed that sufficient for the maintenance of an average family in average seasons and circumstances.

The remaining leasehold area in New South Wales which can be converted into freehold is made up of 650,384 acres held under *special leases,* chiefly granted for the purposes of business or industry, of 13,365 acres which constitute *residential leaseholds on mineral fields,* and of 3,859 acres

which are part of the former reserves for the purposes of churches and schools.

The following table shows the position from 1861 to 1917 with regard to the total area of New South Wales which is no longer controlled by the State:

TABLE III. — *Land Placed beyond State Control.*

Year	Area alienated	Area conditionally purchased & so remaining	Total area alienated and in course of alienation	Leasehold convertible to freehold	Total area beyond State control
	acres	acres	acres	acres	acres
1861	7,146,579	—	7,146,579	—	7,116,579
1871	8,630,604	2,280,000	10,910,604	—	10,910,604
1881	22,406,746	12,886,879	35,293,625	—	35,293,625
1891	23,775,410	19,793,321	43,568,731	11,234,131	54,802,862
1901	27,934,627	20,044,703	47,979,330	13,980,942	61,960,272
1906	33,470,512	16,499,823	49,970,335	15,807,249	65,777,584
1911	38,501,167	15,614,036	54,115,203	25,352,311	79,467,514
1916	41,172,383	18,315,095	59,487,478	22,044,506	81,531,984
1917	41,549,337	18,693,429	60,242,766	21,124,423	81,367,189

§ 2. LAND HELD OF THE CROWN ON LONG LEASES.

The land held of the Crown on long leases is principally grazing land. Of the seventy-seven million acres of leasehold of this description, nearly sixty-seven million lie in the Western Division, that least settled part of the State which is almost entirely devoted to the pastoral industry.

A. *Leases in the Western Division.*

The land of the Western Division of New South Wales is mainly under the separate administration of the Western Lands Board which is governed by the Western Lands Acts of 1901 and 1905. All holders in the division may apply to have their land brought under these Acts which now regulate the tenure of seventy-three out of the total eighty million acres in the Division. Nine holdings, totalling 1,136,475 acres, having, that is, an average area of more than 100,000 acres each, are still held on pastoral leases outside the Acts.

The vast area of 65,837,147 acres is held under the Acts on Western Land Leases. The rent is in every case determined by the Western Lands Board, the minimum being 2*s.* 6*d.* per square mile and the maximum 7*d.* per sheep on the basis of the land's carrying capacity as determined by the Board. With a few comparatively unimportant exceptions (1) all these leases expire on 30 June 1943.

The great extent of some of these leasehold farms is evinced by the circumstance that 40,312,709 acres are held on "pastoral leases" by only 300 holders, while 209,950 acres are held on "inferior lands leases" by four holders. That the beginnings of closer settlement exist appears from the fact that smaller areas are held under the Acts on "homestead", "improvement", "settlement" and other leases.

In addition to the 65,837,147 acres of Western Lands Leasehold, 7,881,026 acres in the division are held by occupation licences under the Western Lands Board.

B. *Leases in the Eastern and Central Divisions.*

Leases to Outgoing Pastoral Lessees represent a step in the process of settling more closely certain tracts of land which once formed large grazing leaseholds. Under the Crown Lands Amendment Act of 1903 the registered holder of any pastoral lease or preferential or other occupation license could apply for a lease of not more than twenty-eight years of an area not exceeding one third of the total area he had previously held under his pastoral lease or license. Rent and other conditions were as determined. This provision of the Act has since been repealed, but on 30 June 1917 there were 133 of these leases in being and the land held by them had a total area of 802,911 acres.

Crown leases were constituted by the Crown Lands Amendment Act of 1912 and they are applicable to all lands which can be acquired by conditional purchase and to certain other lands, set apart as Crown Leasehold and advertised as such in the State's official *Gazette*. The term of a Crown lease is forty-five years; the rent is 1 ¼ per cent. of the capital value of the land as determined every fifteen years. The first year's rent may be remitted if the tenant spend an amount equivalent thereto on improvements additional to those required of him as a condition of his lease. He must reside on the land for five years. During the last five years of his term he may apply for leave to convert into a homestead farm as much of his land as will support an average family in average circumstances and seasons. Conversion into a conditional purchase is also possible on certain conditions.

The following table gives details as to Crown leases granted up till 30 June 1917.

(1) The exceptions are constituted by 551,778 acres held by special leases.

TABLE IV. — *Crown Leases* 1912-1917.

30 June	Leases current	
	No.	Area in acres
1912 .	54	168,392
1913 .	330	555,864
1914 .	805	880,785
1915 .	1,600	1,563,684
1916 .	1,760	1,896,765
1917 .	2,033 (1)	2,134,446

(1) Includes 40 leases of a total area of 99,885 acres for returned soldiers (*vide infra*)

The special leases on which inferior land is granted in the Eastern and Central Divisions are known, respectively, as *scrub leases*, *inferior lands leases*, *improvement leases* and *snow land leases*, the last-named being leases of land which is covered with snow for part of the year. There is no limit to the area which may be granted by a scrub or an inferior lands lease: 1,888,145 acres were held by leases of these kinds by 280 tenants on 30 June 1917. At the same date three tenants held 10,999 acres on snow-lands leases. The area which may be granted by an improvement lease is limited to 20,480 acres. The lease is in this case for twenty-eight years, at the expiry of which the lessee has tenant-right in improvements. During the last year he may apply for leave to convert into a homestead farm as much of his land as would support an average family in average seasons and circumstances. On 30 June 1917, 4,680,246 acres were held on improvement leases by 977 tenants.

§ 3. LAND AVAILABLE FOR SETTLEMENT.

Some 32 millions of acres in New South Wales are, as stated at the beginning of this article, still at the free disposal of the Crown. One and a half million acres were made available for settlement in 1916-17; but this area includes not only land which was not permanently occupied previously, but also, as the following table indicates, certain land acquired from private owners for purposes of closer settlement.

TABLE V. — *Land made available for settlement in* 1916-17.

Land available as	For ordinary settlement	For soldiers' settlement	Total
	acres	acres	acres
Crown leasehold	773,746	183,347	960,093
» » (additional areas)	164,398	31	164,429
Homestead farms	28,343	203,581	231,924
» » (» ») .	19,916	1,776	21,692
Suburban holdings	2,964	1,035	3,999
Additional holdings (ordinary). .	14,002		14,002
Irrigation farms and allotments .	273		273
Week-end leasehold (1)	804		804
Area acquired under Closer Settlement Act	2,550	48	2,598
Town lands leasehold.	215		215
Returned soldiers' special holdings		14,653	14,653
Area acquired under Closer Settlement Promotion Act . . .	29,876		29,876
	1,037,087	407,471	1,444,558
Area gazetted before 30 June 1917 but not available until after that date	86,335	43,802	130,137
Total . . .	1,123,422	451,273	1,574,695

As regards the 2,598 acres stated in the foregoing table to have been acquired under the *Closer Settlement Act*, the reference is to the Acts passed from 1901 to 1909. Under these the State may purchase by agreement with the owner or compulsorily resume, for purposes of closer settlement, private lands of which the unimproved value exceeds £20,000, private lands within 15 miles of a newly constructed railway, and lands held under a lease to an outgoing pastoral lessee, an improvement lease or a scrub lease.

Land made available for settlement under this legislation is paid for by the settler acquiring it in thirty-two annual instalments, the unpaid portion of the price bearing interest at the rate of 6 ½ per cent. This rate is however 4 per cent. and each instalment is 5 per cent. of the capital value of the land if the land was made available before 1 January 1917. The settler must reside on his holding for ten years, to begin, as a rule, within twelve months of the time at which the Land Board accepts him

(1) Week-end leases, which were created by the Crown Lands Amendment Act, 1916, are leases in perpetuity, the annual rent being 2 ½ per cent. of the capital value. Residence on a lot held by such a lease is not compulsory. Thirty-six week-end leases of a total area of 55 acres were granted in 1916-17.

as a purchaser. On unimproved land he must effect permanent improvements of a value equal to 10 per cent. of the land's capital value within two years of the date of the acceptance of his application for the holding, and further improvements equal to 5 per cent. of such value within five years and to 10 per cent. thereof within ten years of the same date. Existing improvements fulfil this condition to the extent of their value.

On 30 June 1917, 1,622 farms having a total area of 759,753 acres had been allotted under the Closer Settlement Acts. Forty-six of them, extending over 24,943 acres, had been converted into homestead farms, so that 1,576 allotted farms, having an area of 734,810 acres, were still under the Acts. Sixty-one farms, having a total area of 52,124 acres, had been formed but not allotted; but of these 22, containing 17,864 acres, were being utilized in connection with the Government scheme of share farming (1). Thirty-nine farms, covering 34,260 acres, therefore remained available for settlers.

From Table V, it also appears that land acquired under the *Closer Settlement Promotion Act* was made available for settlement. This Act, which was passed in 1910, enables three or more persons, who are qualified to buy land acquired under the Closer Settlement legislation, to negotiate with a private owner of land and to apply, if the negotiations are successful, to have such land brought under the Act. If the Minister of Lands then gives his approval the owner surrenders the land to the Crown, and the applicants acquire it as a settlement purchase. The area is divided among the applicants whose co-operation thereupon ceases. Each deposits £5, the costs of surveys, and 6 ½ per cent. of the Crown valuation of the farm allotted to him. He obtains an advance, secured by a mortgage on the land, from the Commissioners of the Government Savings Bank, which advance is limited to 93 ½ per cent. of the Crown valuation of his farm and to the sum of £3,000. The total advances under this head in any financial year may not exceed £1,000,000. The present regulations provide that a settler repays his advance at the rate of 6 ½ per cent. of the capital value of the farm, to include interest at the rate of 5 ½ per cent. on the outstanding portion of the price, the whole debt being discharged in thirty-two years. In 1914 the Act was so amended that the Minister of Lands has superseded the Government Savings Bank as lender of the price, paying it out of the Closer Settlement Fund or issuing Closer Settlement Debentures to cover its amount.

Betweeen September 1910 and 30 June 1917, 985 farms having an aggregate area of 391,920 acres were allotted under the Closer Settlement Promotion Act.

Table V. shows, finally, that the government of New South Wales has taken special measures to render land available for *settlement by returned soldiers*, setting apart for them 451,273 acres out of the total area made available; and from the footnotes to Tables I and IV it further

(1) See our issue for June 1916, page 129

appears that 82 homestead farms covering 64,476 acres, and 40 Crown leaseholds covering 99,885 acres have been granted to returned soldiers. By the Returned Soldiers' Settlement Act, 1916, land may be set apart to be disposed of only to returned soldiers, and the Minister may help these settlers to clear, fence and generally improve their land, and to erect buildings and buy stock, implements and other requisites. In 1916-17, 94 applications were received for returned soldiers' special holdings to cover a total area of 1,809 acres. There were 52 of these holdings actually in existence on 30 June 1917 and they had an aggregate area of 639 acres. By an amendment to the Act of 1916, passed in 1917, it was provided that one or more discharged soldiers might apply for land under the Closer Settlement Promotion Act if they had the qualifications for applicants which that Act required.

GREAT BRITAIN AND IRELAND.

I. — THE WORK OF THE CONGESTED DISTRICTS BOARD FOR IRELAND FROM 1914-15 TO 1917-18 (*continued*).

§ 5. The improvement of holdings.

Erection and Improvement of Dwelling-houses. — In the article in our issue of February 1915 the important work of the Board in building new and convenient dwelling-houses on holdings and in enabling tenants to improve their existing houses was described. This work has been continued, within certain necessary limits, throughout the years of war. Like land improvement it has however been impeded by the scarcity and costliness of labour and of materials. The following figures give an idea of what has been accomplished. They are taken from the Board's reports, which do not give detailed figures for 1914-15 and which include the data as to the building and improvement of outhouses with those regarding dwelling-houses for the year 1915-16 and for the period from 1891 to 1916.

In certain cases tenants purchase holdings while the buildings on them are still in an unimproved state; and such tenant-purchasers can receive loans from the Board, to be used to make their houses sanitary or convenient, under a special scheme. The maximum limit of a loan of this kind is £50, and the intention is that the tenants should themselves do the unskilled labour, such as quarrying, lime-burning and attendance on the skilled workmen, which the improvements involve. During the five years which ended on 31 March 1915 a sum of £11,903 was advanced under this scheme, £3,644 of it in 1914-15. But in the latter year the Board was obliged by its financial circumstances to suspend the operation of the

TABLE I. — *Building and Improvement of Dwelling-houses and Outbuildings* 1915-16 *to* 1917-18.

	1915-16	1916-17	1917-18	1891-31 March 1916
Dwelling-houses:				
No. built by the Board	210	204	147	2,658
No. built or substantially improved by tenants	281	294	295	2,229
No. improved by tenants with assistance from Board	101	37	60	3,179
Total amount spent by Board on such building and improvements	£53,235	£52,270	£45,696	£596,878
Outbuildings:				
No. built by the Board	—	176	132	—
No. built or substantially improved by tenants	—	111	92	—
No. improved by tenants with assistance from Board	—	6	6	—
Total amount spent by Board on such building and improvements	—	£7,907	£7,388	—
Total amount spent by Board on dwelling-houses and outbuildings	£53,235	£60,177	£53,084	£596,878

scheme, except in the few cases in which loans had already received preliminary sanction.

Under the " Parish Committee Scheme ", described in our previous article (1), land holders whose holdings have a rateable value of less than £7 receive loans which enable them to erect new or to improve existing buildings. In the five years ending on 31 March 1915 the net sum expended by the Board under this scheme was £51,662, and in the year 1914-1915 it was £10,737. The operation of this scheme also was suspended.

Loans for Purchase of Live Stock. — It is a practice of the Board which has continued through the years of war, to make loans for the purchase of live stock to tenants who migrate to new holdings or receive substantial additions to their existing holdings. In 1915-16 it was decided not to issue further loans of this kind except to tenants who insure their stock under the Board's insurance scheme. This provides that on payment of a half-yearly premium, calculated at the rate of 4 per cent. per annum on the declared value of the insured animal at the beginning of each half-year, the owner will be paid two thirds of this declared value if the animal

(1) See our issue for February 1915, page 116.

die during the half-year. In 1916-17 and 1917-18, therefore, all stock bought with these loans was thus insured.

On loans for the purchase of live stock borrowers pay 3½ per cent. per annum which includes interest and an instalment of repayment of capital.

The following figures give details as to these loans:

TABLE II. — *Loans for the Purchase of Live Stock* 1914-15 *to* 1917-18.

	1914-15	1915-16	1916-17	1917-18
for loans.	124	98	92	106
Number of loans issued	123	82	81	96
Amount of loans issued	£3,065	£2,510	£2,648	£2,803

§ 6. SEA FISHERIES.

In our previous article we described the work done by the Congested Districts Board for the development of the fishing industry. It has consisted largely in helping fishermen to procure suitable boats and gear, two methods being mainly adopted for this end, that of making loans which are gradually repaid, and that of the so-called "share system," by which the Board supplies boat and gear and receives a share of produce until its outlay has been repaid when boat and gear become the property of the crew.

Boats Worked by the Share System. — During the years for which the Board has been active conditions of fishing on the west coast of Ireland have altered. In County Donegal only open boats were used by the fishermen until 1894, when the Board introduced large decked sailing boats for herring fishing. The boats of both kinds were worked by local crews on a share system. The sailing boats were handed over with the gear to a crew of six men who were joint owners save for the obligation to repay to the Board about one third of net earnings. The system worked satisfactorily for many years, and the Board was repaid the entire cost of the sailing boats and gear originally supplied.

In 1914-15 fifty-eight decked sailing boats worked by the Board and local crews jointly, on the share system, were fishing on the Donegal coast and their earnings were estimated to be £3,280.

About 1907 the sailing fishing boats found themselves handicapped in competition with steam-drifters from Scotland and England. The Board, at the request of the Donegal fishermen and with the aid of a loan from the Development Commission, therefore acquired some steam drifters and motor boats.

The following figures give details as to the working in 1914-15 and 1915-16 of the five steam-drifters owned by the Board, and of its motor-boats of which ten were engaged in 1914-15 and eight in 1915-16.

TABLE III. — *Earnings of the Board's Steam-Drifters and Motor-Boats* 1914-15 *and* 1915-16.

		Steam-drifters		Motor-boats	
		1914-15	1915-16	1914-15	1915-16
		£	£	£	£
Gross earnings		6,075	5,472	4,829	6,210
Net "		3,544	3,541	3,613	5,424
Distribution of net earnings	Crews' shares	886	886	2,207	2,582
	Skippers' and mates' shares	310	310		
	Board's shares	2,348	2,348	1,105	2,841

The Board did not buy steam-drifters with the object of eventually making the crews owners of the boats and gear but hoped that, as in Scotland and England, local capitalists would invest money in this enterprise. During 1915-16, however, all its five steam-drifters were taken by the Admiralty on charter for naval purposes. In the case of both the motor-boats and the decked sailing boats the Board decided in 1914-15 that it was not desirable to continue the system by which the crews gradually acquired the boats as the Board's shares of earnings repaid the outlay on them.

The time needed for such repayment was so long that men lost sight of the prospect of becoming owners and changed from one boat to another, with the consequence that boats and gear were not kept in good order.

It was therefore resolved to value the boats and gear at the end of the 1914-15 season, and to offer each boat to one or more fishermen, its value being treated as a loan repayable by half-yearly instalments. This resolution was put into practice, and, on 31 March 1916, 45 out of the 77 sailing and all the ten motor boats previously worked by the share system had been sold to fishermen who were in most cases able to pay part of the purchase money in cash out of their savings. The rapid conclusion of the transactions was facilitated by a good herring season in the autumn of 1915. Since it was hoped to sell the remaining 32 sailing boats in the current year the Board had practically abrogated its functions as a boat owner.

Loans for Purposes of Fishing. — It is naturally more difficult to obtain precise figures as to boats acquired or partly acquired by means of loans from the Board than as to boats of which the Board remained owner. It was estimated that in 1914-15 the earnings of the decked sailing-boats acquired by means of these loans were at least equal to those of the similar boats worked on the share system. In 1916-17 a considerable increase was noted in the number of motor-boats thus acquired. Fishermen receiving a loan for the purchase of a motor boat were obliged to insure the boat against ordinary and war risks and also to mortgage it to the

Board as security for the due repayment by instalments of the loan. On 31 March 1917 the Board had been obliged to take possession of boats so mortgaged in only two cases, but in one district heavy arrears of due payments had accumulated owing to an Admiralty prohibition to fish in the local waters.

The loans for the purchase of open boats are small in amount and are regularly and punctually repaid. These boats are usually owned by men who are also farmers of small holdings, but who look to their fishing to constitute an important part of their earnings.

The following figures give details as to loans for purposes of fishing from 1 April 1914 to 31 March 1918:

TABLE IV. — *Loans for Purposes of Fishing*, 1914-15 *to* 1917-18.

	1914-15	1915-16	1916-17	1917-18
No. of loans issued	150	317	483	523
Amount of loans issued	£11,237	£10,945	£21,100	£30,011
No. of instalments in arrears at end of year	30	267	219	116
Amount of instalments in arrears at end of year	£2,869	£2,144	£2,367	£1,208

In considering these figures it should be remembered that war conditions have been on the whole favourable to the fishing industry. Some important waters, notably Lough Swilly, were indeed closed to fishing by the Admiralty; recruiting for the navy and army diminished the fishing community; from 1915-16 onwards the quantities of fish which could be shipped to markets in Great Britain were curtailed. But from the time of the outbreak of the war the price of fish rose constantly; and over the whole period the resultant increase in gains seems to have outbalanced the rise in the prices of boats, motor engines, sails, capstans, nets and lines which are noted as being exorbitant in the report for 1917-18. A further advantage was the decrease in the number of Scottish and English steam-trawlers, steam-drifters and steam-liners. Owing to the absence of these boats fish were not intercepted when they were approaching shallow waters in the spawning seasons, and therefore became more plentiful.

In conclusion, we refer our readers to our issue for December 1917 (1) for an account of a very successful experiment in co-operative fishing in the Aran Islands.

§ 7. RURAL INDUSTRIES.

The Congested District Board has for many years encouraged the home industries of the Irish countryside by holding classes for girls, especially in *lace making* and *crochet*. The money which women and girls have

earned by making Irish lace and crochet and also, to a less extent, by *embroidery* has in many of the poorer districts been necessary to enable numerous families to live in any kind of comfort. In some districts the earnings of the girls have actually exceeded the rent-roll. The savings from such earnings have sufficed in many instances to stock holdings with cattle, and have provided capital which has placed the occupiers permanently in a position to farm their land more profitably and to command a constant supply of milk for their children.

The following figures show the sums which were earned by the Board's Female Industrial Classes from 1 April 1912 to 31 March 1918.

1912-13	£29,754
1913-14	£17,565
1914-15	£11,680
1915-16	£16,349
1916-17	£31,697
1917-18	£55,386

It will be noticed that there was a very serious decrease in earnings between 1912-13 and 1915. This was due to a decline in the fashion for Irish lace and crochet, to the competition of Austrian goods, and to the dulness of the American market, and was accentuated after the declaration of war which caused lessened expenditure on dress. The demand for embroidery also fell. In 1914-15 the Board decided to close 33 small classes and branch classes in lacemaking and crochet of which the earnings were low. The collapse of this main female industry caused a critical situation in the congested districts, and the Board resolved to distribute its enterprise over more industries, so that changes in fashion would in future have less disastrous effects.

The situation was however remedied by war conditions, which eventually caused a large demand for articles made by Irish peasant women, especially *knitted woollen articles* supplied both to the army and navy and to general traders, and which at the same time eliminated foreign competition. Our figures show that there was a considerable rise in earnings between 1914-15 and 1915-16, and that in 1916-17, they exceeded while in 1917-18 they nearly doubled the amount they had reached in 1912-13. In 1916-17 the large use of knitting machines, a slight revival in the demand for Irish crochet, and the success which had attended *buttonmaking* are noted in the report on these industries. In 1917-18 it was estimated that when an industry was started by the Board, the workers received about two thirds of the sum earned, the remaining third going to repay the cost of material.

The *weaving* industry, which is followed by men rather than women, has made steady progress, stated in 1915-16 to have been accentuated by the war which had increased the demand for homespun tweeds and had raised prices. The Board has encouraged weaving by providing instruction and awarding prizes, introducing improved looms, affording informa-

tion as to dyes, and establishing and supervising two monthly markets in South Donegal which is the chief district for the industry.

Kelp-burning is an important industry among the peasants living on the west coast. They collect seaweed and burn it in open kilns or pits, thus producing kelp. In past years as much as £40 a season was sometimes earned by a family by kelp-burning, but there was a subsequent decline, followed by a gradual recovery after the war had caused a large demand for iodine which is the most valuable product from kelp. In 1914-15 a family could make about £20 a season in the best kelp-burning districts, in 1915-16 as much as £30. In 1916-17 the market was enlarged because a firm of manure manufacturers bought large quantities of the kelp at a good price.

In 1916-17 the Board was obliged by the dearth of labour to close its *marble and granite works* in Galway. In the same year it made the experiment of starting a *toymaking* class, also in Galway. Mention should finally be made of the instruction the Board has provided in domestic economy for girls, and for youths in carpentry, cooperage and the driving of motor engines for boats.

The following figures, which give details as to the loans made by the Board for industrial purposes, afford an idea of the scope of its work of encouraging rural industries.

TABLE V. — *Loans for Purposes of Industry* 1914-15 *to* 1917-18.

Purpose of loans applied for	Number of loans applied for			
	1914-15	1915-16	1916-17	1917-18
Looms	3	4	1	25
Spinning wheels	4	1	—	3
Carding machines	—	—	1	—
Knitting machines	43	29	5	3
Blacksmiths' tools	1	1	1	—
Carpenters' tools	—	—	1	1
Barrel-making materials	—	1	1	2
Boat-building plant	—	-	-	1
Sawmills	—	—	—	1
Boats for agricultural and industrial purposes	1	2	1	2
Co-operative dairy society	1	—	--	—
Co-operative agricultural society (for repairs to building)	—	—	—	1 (£30)
Equipment of knitting factory	—	—	—	1 (£500)
Total number of applications for loans	53	38	12	40
Total number of loans issued	29	33	13	18
Total amount of loans issued	£305	£395	£110	£1,076

It should be recollected in considering the amounts earned in the peasant industries that, especially in the knitting industry, much money was earned from the year 1915-16 onwards by women who worked for commercial firms independently of the Board's classes, using in some cases knitting-machines bought with money lent by the Board. The Board has sometimes helped these firms with its instruction and advice.

§ 8. Marine works and means of communication.

An important part of the work of the Congested Districts Board has always been the provision of the *piers and landing-places, roads and bridges* which allow the products of the West of Ireland to be marketed and relieve its isolation. In 1915-16 the Board decided, owing to the war, to suspend its grants for piers and landing-places and for roads other than the roads on its own estates, and expenditure in this year was therefore confined to repairs. But the needs of the fishing industry were such that a grant was obtained from the Development Commissioners and supplemented by smaller grants from the Cork County Council and the Cork Bandon and South Coast Railway Company, and aided by the funds thus obtained a deep-water pier with a railway extension was constructed at Baltimore in County Cork in 1916-17 and 1917-18. Other marine works were contemplated in 1917-18.

The following figures shew the sums which the Board has spent on these engineering works during the years of war.

Table VI. — *Sums spent on Engineering Works* 1914-15 *to* 1917-18.

	1914-15	1915-16	1916-17	1917-18
Piers and other marine works	£5,177	£1,574	£1,803	£835
Roads and bridges	£3,531	£811	£2,167	£844

The Board subsidizes steamer services between the Aran Islands and Galway and between Belmullet and Sligo. Owing to the increase in working expenses, especially in the price of coal, it was necessary somewhat to curtail services and to raise freights during the war. Some mail-car and mail-boat services in remote districts are also subsidized, and certain receipts by telegraph or money-order offices are guaranteed by the Board.

§ 9. Loans to agricultural banks.

Some years ago the Congested Districts Board advanced the sum of £7,345 to co-operative agicultural credit banks in the West of Ireland.

Owing to the necessity of getting in outstanding loans as quickly as possible it was decided to recall these loans gradually. The following table shows the amounts still outstanding in the several years which we are examining, and thus allows the rate at which repayments were made in the period of the war to be estimated:

TABLE VII. — *Outstanding Loans to Agricultural Banks, 1915 to 1918.*

	31 March 1915	31 March 1916	31 March 1917	31 March 1918
Number of banks having outstanding loans	45	30	17	10
Amount outstanding.	£4,127	£2,097	£807	£276

Before concluding this brief survey of the work of the Congested Districts Board in recent years mention should be made of its valuable enterprise of providing highly trained nurses for remote districts. It has here co-operated with the committee of Lady Dudley's nursing scheme.

2. — MINIMUM WAGES FOR AGRICULTURAL LABOUR IN ENGLAND AND WALES.

SOURCES (OFFICIAL):

THE CORN PRODUCTION ACT 1917

PROVISIONAL REGULATIONS WITH RESPECT TO THE CONSTITUTION AND PROCEEDINGS OF THE AGRICULTURAL WAGES BOARD (ENGLAND AND WALES), SET UP UNDER THE CORN PRODUCTION ACT 1917, issued by the Board of Agriculture, September 1917

ORDERS FIXING OR VARYING MINIMUM RATES OF WAGES, issued by the Agricultural Wages Board at various dates in 1918 and 1919.

ORDER AS TO BENEFITS AND ADVANTAGES WHICH MAY BE RECKONED AS PAYMENT OF WAGES IN LIEU OF PAYMENT IN CASH, issued by the Agricultural Wages Board 6 September 1918.

THE JOURNAL OF THE BOARD OF AGRICULTURE, September 1917 and subsequent issues

THE WAGES BOARD GAZETTE, 15 August 1918 and subsequent issues.

During the War the position of the agricultural labourer in England and Wales underwent a substantial change. In spite of the exemption from military service granted to many rural workers, a very large number was called up, leaving a considerable deficit in the supply of labour. Many sources were drawn upon to make good the deficiency. Women workers, school boys, soldiers temporarily released from service, prisoners of war, all

contributed to furnish the labour which was necessary to replace the workers called up.

But inevitably the agricultural labourers who remained — the men already possessed of the knowledge and skill which others were obliged hastily to acquire — were able to obtain better wages than they had previously been paid and to secure better conditions of employment.

That the agricultural labourer, whose work had so suddenly become of supreme importance to the country, was entitled to special treatment was recognized by the Legislature when in the Corn Production Act 1917 were inserted provisions for the establishment of an Agricultural Wages Board for each of the three Kingdoms for the purpose of fixing minimum rates of wages for agricultural labour.

We have already in this Review (1) given an account of the establishment of the Agricultural Wages Board for England and Wales and some illustrations of the minimum wages which it has fixed but we propose in this article to give a fuller statement of its constitution and of the work which it has carried out.

§ 1. The Agricultural Wages Board.

In Part II of the Corn Production Act 1917 (the main object of which was to extend the cultivation of cereals in the United Kingdom) it was enacted that the Board of Agriculture and Fisheries, in consultation with the Ministry of Labour should appoint an Agricultural Wages Board, for the fixing of minimum wages for workmen employed in agriculture in England and Wales. To the terms "workmen" and "employed in agriculture" wide interpretations were given, so that, in fact, the Wages Board was empowered to fix minimum wages for men, boys, women and girls, working not only on farms, but on osier land, woodland, orchards, market gardens and nursery grounds.

The Wages Board was to consist of members representing employers, members representing workers and members appointed by the Board of Agriculture who might be expected to form an impartial judgement as between employers' and workers' interests. It was left to the Board of Agriculture to make regulations fixing the numbers of each class of member, subject to the provision that the representatives of the employers and the representatives of the workers must be equal in number and that the appointed members must not exceed in number one quarter of the whole Board.

The Board of Agriculture decided that the Wages Board should consist of 39 persons, of whom seven were to be appointed members and the remainder representative members.

Of the 16 members representing the employers, eight were to be nominated by the Board of Agriculture, while each of the following bodies was to be asked to elect two members: The Council of the Royal Agricultural So-

(1) Issues of October 1917 (page 67), May 1918 (page 436), June 1918 (page 523), August 1918 (page 699), October 1918 (page 850) and November-December 1918 (page 938).

ciety of England; the General Executive Committee of the National Farmers' Union; the Council of the Central and Associated Chambers of Agriculture; the Welsh Agricultural Council.

Of the members representing workmen six were to be elected by the Executive Committee of the National Agricultural Labourers' and Rural Workers' Union, and two by the General Executive Committee of the Workers' Union, while the remainder were to be nominated by the Board of Agriculture.

If the result of the elections were such that in the opinion of the Board of Agriculture, a fair representation of all classes of farming and of the various conditions of employment in agriculture in all parts of the country could not be secured, the Board of Agriculture reserved to itself the right to nominate a representative member in place of any person elected.

The normal term of office of an appointed member was fixed at two years and that of representative member at three years, but it was laid down that at the end of one year five members representing employers and five members representing workers should retire by lot and at the end of two years other five representing employers and five representing workers.

To preserve the balance between employers' and workers' representatives it was provided that if at any meeting their numbers were unequal, the side which was in a majority could arrange that one or more of their members should refrain from voting. Failing such arrangement, the chairman might, if he thought desirable, adjourn the voting on any question to another meeting of the Board.

The Wages Board was formed in accordance with these regulations. Sir Ailwyn Fellowes, a former President of the Board of Agriculture, was appointed Chairman, and Sir R. Henry Rew, Assistant Secretary to the Board of Agriculture, was appointed Deputy Chairman. Amongst the appointed members was one woman, Mrs. L. Wilkins. The first meeting of the Wages Board was held on 6 December 1917.

§ 2. District wages committees.

The Corn Production Act provided also for the formation of District Wages Committees. The appointment of such Committees was left to the option of the Agricultural Wages Board, subject to the right of the Board of Agricultur to insist on their formation. The areas for which they were to act was left to the Wages Board to determine, but their composition was to be settled by regulations made by the Board of Agriculture. The Act merely laid down that there was to be equal representation on the District Committees of local employers and local workers and that at least one member of the Wages Board or other person nominated by the Board of Agriculture should act on each District Committee.

In determining the areas in which the District Wages Committees were to act the Wages Board took as the basis the geographical counties, but in some cases counties were grouped to form a single area. In all 39 districts were formed of which 27 corresponded to geographical counties, while 11 contained two or more counties. One of the areas was less than a county,

the Furness District having been detached from the county of Lancashire and grouped with Cumberland and Westmorland.

The method adopted for the formation of District Wages Committees was for the members of the Wages Board representing the employers to recommend representatives of the local employers, while the members representing the workers recommended representatives of the local workers. These recommendations were carefully considered by a Selection Committee, consisting of four employers' representatives, four workers' representatives and four appointed members. The Selection Committee in turn made recommendations to the Wages Board, who had the final decision in regard to the nomination of the representatives of the local employers and the local workers. To these were added the impartial members appointed for each Committee by the Board of Agriculture.

Some workers who had been invited by the Wages Board to serve on District Wages Committees found that their employers raised objections to their doing so, and one or two were even threatened with dismissal if they accepted the invitation. The representatives of the employers on the Agricultural Wages Board issued in January 1918 a statement in which they expressed the hope that no employer would place any difficulty whatever in the way of any worker who might be selected to represent his class. "We are convinced," the statement continued, "that the future of British agriculture largely depends upon the co-operation between capital and labour in farming, which we believe the Agricultural Wages Board and the District Wages Committees will promote. We have already found that the representatives of workers on the Wages Board are prepared to work with us in a reasonable and broad-minded spirit, and we believe that they, like ourselves, will discuss questions on which we may differ with a sincere desire to establish and maintain fair and friendly relations between employers and employed. Nothing, in our opinion, would be more detrimental to the interests of agriculture than an attempt by individuals to interfere with or impede the acceptance by any man of an invitation to represent his class, and we confidently appeal to the patriotism and good sense of farmers generally to recognise that the selection without hindrance by workers of their representatives is essential to the establishment of District Wages Committees on a sound and satisfactory basis."

The appeal appears to have been effective, as little further opposition on the part of employers was experienced

The earliest District Wages Committees to be formed were established at the end of January 1918, and by the middle of May the Agricultural Wages Board was able to issue a notice stating that Committees had been formed in each of the 39 areas into which England and Wales had been divided.

It is the function of the District Wages Committees, as laid down by the Corn Production Act, to recommend to the Wages Board minimum rates of wages applicable to their districts. Only the Wages Board itself can fix, vary or cancel any such rate, but it cannot make any orders to this effect

which shall be applicable in any area where a District Wages Committee exists, unless the Committee has either recommended the rate or its variation or cancellation, or has had an opportunity of reporting thereon to the Board.

The Act also empowered the Wages Board to delegate any of its powers and duties (other than the power and duty of fixing minimum rates) to the District Wages Committees. The principal power which has been so delegated is that of granting "permits of exemption," that is permits to workers on time-work who are affected by mental or other infirmity or physical injury which renders them incapable of performing the work of a normally efficient workman, to accept employment at rates less than the minimum wage.

§ 3. Procedure in fixing minimum rates.

In fixing any minimum rate of wages the Agricultural Wages Board must, as we have seen, either act upon the recommendation of a District Wages Committee, or give the Committee the opportunity to report upon the proposal. It must also give public notice of the rate it proposes to fix and must consider any objections which may be lodged with it within one month. When a rate has been fixed it must further give notice of such rate for the information of the employers and workers affected.

The same procedure applies to the variation or cancellation of any order fixing a minimum rate.

§ 4. The principles on which minimum wages are fixed.

The Corn Production Act imposed upon the Agricultural Wages Board the duty of fixing minimum rates of wages for *time work* and empowered it, if it thought it necessary or expedient, also to fix minimum rates of wages for *piece-work*. Considerable latitude was allowed to the Board in fixing rates applicable universally, or different rates for different districts, for different classes of workers or for different kinds and conditions of employment.

In the case of able bodied men the Act itself fixed a rate for time-work below which the minimum rate to be fixed by the Wages Board was not to go. This rate was to be such that, when the customary allowances were taken into account, the total wages would be equivalent to payment for an ordinary day's work at a rate of 25*s*. a week. This provision did not apply to boys, women and girls.

The principle laid down by the Act for the guidance of the Wages Board in fixing minimum rates, whether for time-work or for piece-work, was that it should try to secure, so far as practicable, for able bodied men such wages as were, in its opinion, adequate to promote efficiency and to enable a man in an ordinary case to maintain himself and his family in accordance with such standard of comfort as might be reasonable in relation to the nature of his employment.

When a minimum rate has been fixed, the payment by an employer of a less rate is an offence punishable by a fine of not more than £20.

If, after conviction, the employer persists in paying less than the minimum rate fixed, he renders himself liable to a fine not exceeding £1 for every day on which the offence is continued. Pending the fixing of minimum wages by the Wages Board, the rate of 25*s.* a week for able-bodied men was made applicable all over the country, and if less wages were paid the worker was entitled to recover the difference from his employer as a civil debt. When proceedings to recover were taken, the value of the allowances, if it were disputed, was to be determined by the Court.

§ 5. BENEFITS AND ALLOWANCES AS PART PAYMENT OF WAGES.

The Agricultural Wages Board found it necessary to take steps at once to decide upon the principles or method to be adopted in estimating the value of those benefits and allowances which were to be calculated as part payment of wages. At its second meeting, held on 20 December 1917 it appointed two committees, each consisting of four employers' representatives, four workers' representatives and four appointed members to consider respectively on what basis the rent of cottages should be assessed and other benefits and allowances should be valued.

It was not, however, until September 1918 that the Board issued an order on the subject. This order, which was entitled " Order as to Benefits and Advantages which may be Reckoned as Payment of Wages in lieu of Payment of Cash ", defined such benefits and advantges as including provision by an employer for a workman employed by him of :

(1) Milk, including skimmed or separated milk.

(2) Potatoes.

(3) Lodging, except in any case in which the District Wages Committee shall determine that the lodging accommodation, provided is so defective as to be injurious to health.

(4) Board, including any meals but not intoxicating drink (1).

(5) A cottage, including any garden hitherto given or let with the cottage except where the cottage is one in regard to which the Medical Officer of Health has reported that it is in a state so dangerous or injurious to health as to be unfit for human habitation.

The values at which milk and potatoes were to be reckoned were the current producers' wholesale prices, which were to be ascertained and determined by the District Wages Committee. Lodging and board were to be reckoned at such weekly sums as the District Wages Committee should determine.

The value of new milk was determined, for all parts of the country, as 6 ½ *d.* per quart *or* the wholesale price fixed for any particular district by the Local Food Control Committee, whichever were the lesser. For skimmed or separated milk, the value was universally fixed at 8*d.* per gallon.

For potatoes of the second grade, the values determined varied from £5 5*s.* per ton up to £7 10*s.* In the majority of counties it was deter-

(1) It is illegal under the Truck Acts to reckon intoxicating drinks as allowances in part payment of wages.

mined at £6 5s. or £6 10s. The value of potatoes of the first grade was determined as 10s. per ton above that of potatoes of the second grade.

Great differences were apparent in the estimation of the value of board and lodging. In 25 English counties the value of full board and lodging for male workers was determined as follows according to the age of the worker: Over 17 years, 18s.; between 16 and 17 years, 17s.; between 15 and 16 years, 15s.; between 14 and 15 years, 12s.; under 14 years, 9s. In the same counties the corresponding figures for female workers were 13s., 12s., 11s., 10s., 9s.

These were the highest figures. In most of the remaining English counties the values were not much lower, but in some counties in the West of England the values were as low as 15s., 15s., 13s., 11s., and 9s. for male workers and 11s., 11s., 11s., 10s., and 9s. for female workers.

In Wales the values determined for male workers were, on the whole, considerably lower than in England. The highest figures for Welsh counties were the same as the lowest figures for English counties, while the lowest figures for Welsh counties were 12s., 12s., 11s., 10s., and 9s. For women the values determined were uniform throughout Wales, being 11s., 11s., 11s., 10s. and 9s.

Recently the values of full board and lodging for male workers have been raised in some counties to 20s., 18s., 18s., 18s., and 15s. 6d. The values determined for female workers have been made uniform throughout England and Wales, being fixed at 13s., 12s., 11s., 10s., and 9s.

Values have also been determined in all areas for partial board and lodging of various degrees as, for example, lodging only, all food and drink (excluding intoxicants), dinner only, breakfast only.

Similar variations were observable in the values determined in the different areas, as in the values of full board and lodging. For female workers they are now uniform throughout England and Wales

The method laid down for the assessment of the value of a cottage was less simple. If the cottage is held from the employer rent and rate free, the provision of the cottage may be reckoned at an amount not exceeding 3s. per week. In other words an amount not exceeding 3s. per week may be deducted from the minimum wage.

A District Wages Committee may, however, decide that the average value customarily attached to cottages in its area is less than 3s. a week and may fix a lower maximum amount at which the provision of a cottage may be reckoned.

In a few parts of the country, this maximum value was fixed by District Wages Committees at less than 3s. per week. Thus in North Buckinghamshire it was fixed at 2s; in Northamptonshire, Herefordshire, Mid-Buckinghamshire and parts of the county of Somerset at 2s. 6d. In by far the greater part of the country, however, the District Wages Committees agreed to the general estimate of 3s. per week.

The District Wages Committees were also authorised to decide as to any particular cottage that it is defective in respect of accommodation, re-

pairs or sanitation, and to fix an amount to be deducted from the maximum value on the ground of such defects.

Where the cottage is held by the worker from the employer at a rental, which is often a " customary " or " nominal " rental, the provision of the cottage may still be reckoned as a " benefit or advantage, " provided the amount of rent and rates paid by the occupier is less than the maximum value fixed for the district (generally, as we have seen, 3s. per week). The amount which may be deducted from the minimum wage in respect of the provision of such a cottage is the maximum value less the amount of rent and rates paid by the occupier.

If the rent and rates paid by the occupier of the cottage equal or exceed the maximum value, no deduction in respect of it may be made from the payment in cash of the full minimum wage.

The Order made by the Wages Board does not, of course apply to cottages which are held under a contract of tenancy which is separate and distinct from the contract of service. It is accordingly open to employer and worker to agree for the payment of the minimum wages in full and to make an independent agreement for the renting of the cottage.

§ 6. Hours of employment: overtime and " walking time. "

In fixing minimum rates of wages for time-work, the Wages Board determined both the minimum wages for a week's work and also the minimum rates per hour to be paid for overtime. To decide what should be considered overime it was necessary to fix the number of hours' work which constituted the normal week's work. This varies somewhat from county to county and is different in " summer " to what it is in " winter ". " Summer " is reckoned as the period from the first Monday in March to the last Sunday in October ; " winter " is the remaining period of the year. The most usual number of hours per week originally fixed for ordinary labourers was 54 in summer and 48 in winter, but in regard to special classes of workers there were great variations, not only as between counties, but as between different parts of the same county. So difficult was it to determine the number of hours worked by special classes that at first the Wages Board was obliged often to content itself in its orders with stating that the number of hours per week was to be taken as the " customary " number, but more recently it has endeavoured to fix a definite number of hours in all cases.

Even when the number of hours per normal week's work is fixed this is not sufficient to determine what work shall be counted as overtime work. The distribution of the hours has to be considered. In the case of ordinary workers, it was assumed in the earlier orders that no ordinary work is done on Sundays. All work done on Sundays was, therefore, treated as overtime and a special minimum rate was fixed for Sunday overtime work. A minimum rate was also fixed for week-day overtime work and this was payable in respect of all employment in any week (excluding Sundays) in excess of the number of hours which formed the basis of the weekly wage.

A demand soon arose for the adoption in agriculture of the weekly half-holiday which is customary in England in almost all other kinds of

labour. The Wages Board showed themselves sympathetic towards this demand and by an order which came into force on 3 March 1919 extended the definition of overtime employment to include "all employment in excess of 6 ½ hours on a Saturday, or on such other day (not being Sunday) in every week as may be agreed between the employed and the worker."

The original definition, be it noted, was merely extended. The hours in excess of 6 ½ hours worked on the short day were reckoned in any case as overtime, but they were not counted twice over. If, for example, the number of hours which formed the basis of the weekly wage were 48 and the worker did 51 hours work in the week (exclusive of Sunday), including 8 hours done on the short day, he would be paid overtime wages for 3 hours, the difference between 51 hours and 48. The 1 ½ hours overtime work which he did on the short day would be included in the three hours' overtime which he had done during the week.

This is the simplest case. Let us take now the case in which the worker only does 48 hours during the week, but does 8 hours on the short day. Here it is necessary to inquire what agreement the employer has made with the worker.

Suppose first that the hours of work agreed between the employer and the worker are 48, to be spread equally over the six days. On the short day 1 ½ hours out of the 8 hours worked would be overtime. Hence the hours of work agreed *exclusive of overtime employment* are only 46 ½ hours per week. But, according to clauses in the previous orders of the Wages Board, if the agreed number of hours in the week, exclusive of overtime employment, are less than the number of hours which forms the basis of the weekly wage (in the supposed case, 48 hours), the full minimum weekly wage must nevertheless be paid. In this case, then, the worker is entitled to the minimum weekly wage plus overtime wages for 1 ½ hours.

In the second place, let us suppose that the employer had agreed with the worker that the 48 hours work should be so arranged that only 6½ hours should be done on the short day and the remaining 41 ½ hours spread over the other five days. In the supposed case the worker has, it is true, done 48 hours during the week, but he has only done 46 ½ hours of normal work instead of 48 hours, as agreed. The employer, then, is entitled to deduct the wages, calculated at the normal rate, in respect of 1 ½ hours. (The normal rate per hour would in the supposed case be a 48th part of the minimum weekly wages). But, on the other hand, the worker is entitled to be paid overtime wages in respect of the 1 ½ hours of overtime which he worked on the short day.

These examples sufficiently explain the method by which overtime is calculated in respect of the short day.

It should be noted that the Wages Board has no power to determine or to regulate the hours of work of agricultural workers or their arrangement. Employer and worker may agree upon any number of hours arranged in any way they like, but they do so subject to the condition that if the total number of hours on week-days exceeds a certain number of hours

determined by the Board, or if the hours worked on the short day exceed 6 ½ hours, the excess hours will be regarded as overtime.

The short day was originally intended to be of universal application, but for certain counties orders have been made or proposed making it inapplicable to workers who, under an agreement with their employers, are entitled to a week's holiday on full pay in each half-year, or a fortnight's holiday on full pay in each year, or to payment of double pay for a week's work in each half-year or for a fortnight's work in each year.

The original order relating to the short day laid it down that the week-day overtime rate should be payable for all employment in excess of 6 ½ hours on that day "except time spent on such day by stockmen of any class in connection with the feeding and cleaning of stock." In regard to this exception, a curious misconception arose. It was imagined by some farmers that it implied that no payment at all need be given for the time spent as stated. The Wages Board had, of course, intended that time so spent should not be reckoned for the payment of overtime in respect of the short day, but that it should be included in the calculation of the total number of hours worked during the week. Recently, however, the Board has issued an order to vary the definition of overtime by omitting this exception, so that for stockmen also any employment in excess of 6 ½ hours on the short day will be treated as overtime.

In connection with the hours of labour the question arose as to whether "walking time," that is the time spent by the worker in walking from his cottage to his place of work and in returning to his cottage, should be reckoned in the hours worked. The position was stated as follows in the *Wages Board Gazette*: "In the absence of any special provision in the contract of service or of any well-established custom of the farm, the time spent by the worker in proceeding from his cottage to his place of work would not be reckoned as employment... By 'place of work' is here meant the actual place where the work is carried on, but if a man's duties require him to go and return to the farm-house before or after his work in the fields (*e. g.*, for the fetching or taking back horses or tools) the time occupied in walking between the two places would rank in his working hours. But if his duties are such that he can go straight from his home to the place of work in the fields and back in the same way, the walking time would not be so reckoned, unless his contract or the custom of the farm provide that he should be paid for that time. The burden of proving the custom would lie on the worker; if it were proved, the custom must be read into the contract of service unless it is expressly excluded."

§ 7. Minimum wages for male workers.

We now give a series of tables showing the minimum wages fixed for male workers. These tables should be read subject to the following observations.

Table I shows the minimum weekly wage for all male workers except certain classes for which special wages have been fixed. By an Order which

came into operation on 19 May 1919 an all-round addition was made to the minimum weekly wages previously fixed for ordinary labourers of 18 years of age and over (1). The increase was :

Workers of	18	and	under	19	years	of	age		3s.	a	week
»	»	19	»	»	20	»	»	»	4s	»	»
»	»	20	»	»	21	»	»	»	5s.	»	»
»	»	21	years	and	over				6s. 6d.	»	

At the same time, the number of hours per week was made 54 in summer and 48 in winter in all counties in England and Wales. In those counties where the number of hours per week had been in excess of this number the additions were made, not to the minimum wages previously in force, but to those wages reduced to a basis of 52 hours per week all the year round.

The minimum wages shown in Table I for workers over 18 years of age are those which came into force on 19 May. For workers under 18 years of age the wages are those previously fixed and the hours per week are not uniform in all counties. Steps are, however, being taken to reduce them in all counties to 54 in summer and 48 in winter without reducing the rates of wages.

Table II shows the overtime rates fixed for ordinary male workers. We have already indicated what employment is considered as overtime employment. For workers over 18 years of age the overtime rates were adjusted by the Order which came into force on 19 May so as to be, as nearly as possible, for overtime work on week days 25 per cent. higher than the average rate per hour, and for overtime work on Sundays 50 per cent. higher than the average rate per hour.

By an order which will come into force on the first Monday in October, the number of hours per week for male workers over 18 years of age will be further reduced to 50 in summer and 48 in winter, and the overtime rates will be adjusted accordingly.

Table III shows the minimum weekly wages and the overtime rates which have been fixed for special classes of male workers over 18 years of age.

There have been considerable variations in the wages fixed for special classes of workers, but with the considerable increase in the wages of ordinary labourers the tendency has been to reduce the number of counties in which special wages are fixed for special classes. Another important change has been the determination of the number of hours for which the minimum wages are payable. In most of the earlier orders no definite number of hours was assigned, the number being taken as the "customary" number of hours per week worked by the special classes of labourers.

(1) Except in Cumberland, Westmorland and the Furness District of Lancashire, where the uniform minimum wage of 35s. per week for all ordinary male workers over 18 years of age remained in force.

TABLE I. — *Minimum Weekly Wages for Ordinary Mule Workers.*

District Wages Committee Areas	Minimum Weekly Wage at Various Ages																	
	Over 21		20–21		19–20		18–19		17–18		16–17		15–16		14–15		Under 14	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Northumberland and Durham	42	6	41	0	40	0	36	0	28	0	23	0	18	0	14	0	10	0
Glamorgan and Monmouth	41	6	38	6	37	6	33	0	28	6	24	6	21	0	18	0	10	0
Yorkshire	41	0	39	6	38	6	37	0	30	0	25	0	20	0	15	0	10	0
Lincolnshire; Middlesex	40	6	35	0	34	0	33	0	26	0	22	0	18	0	14	0	10	0
Lancashire (except Furness District)	39	6	38	0	37	0	36	0	30	0	25	0	20	0	15	0	10	0
Surrey	39	6	36	0	35	0	34	0	26	0	22	0	18	0	14	0	10	0
Kent	39	0	38	0	37	0	36	0	28	0	23	0	18	0	14	0	10	0
Hertfordshire	38	6	36	0	35	0	34	0	26	0	22	0	18	0	14	0	10	0
Staffordshire	38	6	36	0	33	0	32	0	26	0	22	0	18	0	14	0	10	0
Essex; Sussex	38	6	35	0	34	0	33	0	26	0	22	0	18	0	14	0	10	0
Cheshire	38	0	36	6	35	6	34	6	31	0	26	0	21	0	16	0	11	0
Nottinghamshire	38	0	36	6	35	6	34	6	30	0	25	0	20	0	15	0	10	0
Cornwall; Derbyshire; Devonshire; Hampshire; Leicestershire and Rutland	37	6	36	0	35	0	34	0	26	0	22	0	18	0	14	0	10	0
Pembroke, Carmarthen and Cardigan	37	6	35	0	34	0	33	0	26	0	22	0	18	0	14	0	10	0
Shropshire	37	0	33	6	32	6	31	6	26	0	22	0	18	0	14	0	10	0
Anglesey and Carnarvon	36	6	35	0	34	0	33	0	26	0	22	0	18	0	14	0	12	0
Berkshire; Buckinghamshire; Cambridgeshire, Huntingdonshire and Bedfordshire; Denbigh and Flint; Dorset; Gloucester; Herefordshire; Norfolk; Northamptonshire; Oxfordshire; Somerset; Suffolk; Warwickshire; Wiltshire; Worcestershire	36	6	35	0	34	0	33	0	26	0	22	0	18	0	14	0	10	0
Brecon and Radnor: Merioneth and Montgomery	36	6	35	0	34	0	33	0	25	0	20	0	18	0	14	0	10	0
Cumberland, Westmorland and Furness District of Lancashire	35	0	35	0	35	0	35	0	30	0	25	0	20	0	15	0	10	0

TABLE II — *Ordinary Rates for Ordinary Male Workers*

District Committee Areas	Overtime Rates per Hour at Various Ages.																	
	Over 21		20-21		19-20		18-19		17-18		16-17		15-16		14-15		Under 14	
	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays
	d	*d*	*d*	*d*	*d*	*d*	*d*	*d*	*d*	*d*	*d.*	*d.*	*d*	*d*	*d*	*d*	*d*	*d*
Northumberland and Durham	12	14	11½	13½	11	13	10	12	8	9½	6½	7½	5	6	4	4½	3	3½
Glamorgan and Monmouth	11½	14	10½	13	10	12½	9	11	7½	9	6½	7½	5½	6½	4½	5½	2½	3
Yorkshire	11¼	13½	11	13	10½	13	10½	12½	8½	10	7	8½	5½	6½	4	5	3½	3½
Middlesex	11½	13½	10	12	9½	11½	½	11½	7	8½	6	7½	5	6	4	4½	3	3½
Lincolnshire	11½	13½	½	11½	9½	11½	9	11	7	8½	6	7½	5	6	4	4½	3	3½
Lancashire (not Furness)	11	13	10½	12½	10½	12½	10	12	8	9½	7	8	5½	6½	4	5	2½	3
Kent	11	13	10	12½	10	12½	10	12	8	9½	6½	7½	5	6	4	4½	3	3½
Surrey	11	13	10	12	9	11½	½	11½	7	8½	6	7½	5	6	4	4½	3	3½
Hertfordshire	10½	13	10	12	½	11	9½	11½	7	8½	6	7½	5	6	4	4½	3	3½
Staffordshire	10½	13	10	12	9	11		10½	7	8	6	7	4½	5½	3½	4½	2½	3
Essex, Sussex	10½	13	9½	11½	½	11	9	11	7	8½	6	7½	5	6	4	4½	3	3½
Cheshire	10½	12½	10	12	10	12	9	11½	8	9½	6½	8	5	6½	4	5	3	3½
Nottinghamshire	10½	12½	10	12	10	12	9½	11½	7½	9	6½	7½	5	6	4	4½	2½	3
Cornwall, Devonshire, Devonshire, Hampshire, Leicestershire and Rutland	10½	12½	10	12	9½	11½	9½	11½	7	8½	6	7½	5	6	4	4½	3	3½
Pembroke, Carmarthen and Cardigan	10½	12½	9½	11½	9½	11½	9	11½	7	8½	6	7½	5	6	4	4½	3	3½
Shropshire	10½	12½	9½	11½	9	11	9	10½	7	8	6	7	4½	5½	3½	4½	2½	3½
Cumberland, Westmorland and Furness District of Lancashire	10	12	10	12	10	12	10	12	8½	10	7	8½	5½	6½	4	5	3	3½
Berkshire, Buckinghamshire, Cambridgeshire, Huntingdonshire and Bedfordshire, Derbyshire and Flint, Dorset, Gloucester, Norfolk, Northamptonshire, Oxfordshire, Somerset, Suffolk, Warwickshire, Wiltshire, Worcestershire			9½	½	9½					8½		7½				½	3	3½
Anglesey and Carnarvon			9½	½	9½					8½		7				½	3	4
Herefordshire			9½	½	9½					8½		7				½	3	3½
Brecon and Radnor, Merioneth and Montgomery						½				8½	½	6½				½	3	3½

TABLE III. — *Minimum Weekly Wages and Overtime Rates for Special Classes.*

District Wages Committee Area and Class of Workers	Minimum Weekly Wage at Various Ages				Number of Hours per Week for which Minimum Wage is Payable		Overtime Rates per Hour at Various Ages							
	Over 21	20–21	19–20	18–19	Summer	Winter	Over 21		20–21		19–20		18–19	
	s. d	s. d	s. d.	s. d.			Week-days d.	Sun-days d.	Week-days d.	Sun-days d.	Week-days d.	Sun-days d.	Week-days d.	Sun-days d.
ANGLESEY AND CARNARVON: Horsemen, cowmen, shepherds and bailiffs	36 6	35 0	34 0	33 0	50	48	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
BERKSHIRE: Head carter, head cowman, head shepherd, under cowman, under carter and under shepherd	36 6	35 0	34 0	33 0	50	48	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
CAMBRIDGESHIRE, HUNTINGDONSHIRE AND BEDFORSHIRE: Horsekeeper, cowman and shepherd	44 0	42 0	41 6	40 0	63	57	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
Stockmen and yardmen	36 6	35 0	34 0	33 0	50	48	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
CHESHIRE: Head stockman, head teamsman and head shepherd	42 0	40 0	39 6	38 6	54	48	10 1/2	12 1/2	10	12	10	12	9 1/2	11 1/2
Second stockman, second teamsman and second shepherd	40 0	38 6	37 6	36 6	54	48	10 1/2	12 1/2	10	12	10	12	9 1/2	11 1/2
CUMBERLAND, WESTMORLAND AND FURNESS DISTRICT OF LANCASHIRE: Horseman, cattleman and shepherd	50 6	49 6	48 6	48 0	63	63	11	13 1/2	10 1/2	13	10 1/2	13	10 1/2	12 1/2
DENBIGH AND FLINT: Teamman, cattleman, cowman, shepherd and bailiff	43 6	42 0	41 0	39 6	61	58	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
DERBYSHIRE: Stockman, horseman, and shepherd	37 6	36 0	35 0	34 0	50	48	10 1/2	12 1/2	10	12	9 1/2	11 1/2	9 1/2	11 1/2

Market garden workers	42	6	—		—		—		54	48	10 1/2	13	—		—		—	
GLOUCESTER:																				
Horseman	45	0	43	0	42	0	40	6	61	63	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
Stockman and shepherd . . .	46	0	44	0	43	0	42	0	63	63	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
Under hotseman	41	6	40	0	39	0	37	6	57	60	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
Under stockman and under shepherd	43	6	42	0	41	0	39	6	60	60	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
HAMPSHIRE:																				
Carter, dairyman, cowman and shepherd	37	6	36	0	35	0	34	0	50	48	10 1/2	12 1/2	10	12	9 1/2	11 1/2	9 1/2	11 1/2
LINCOLNSHIRE:																				
Stockman, teamsman and shepherd (confined men)	40	6	35	0	34	0	33	0	50	48	11 1/2	13 1/2	9 1/2	11 1/2	9 1/2	11 1/2	9	11
MERIONETH AND MONTGOMERY:																				
Stockmen, teamster, carter and shepherd	43	6	41	6	40	6	39	6	61	58	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
NORFOLK:																				
Teamsman, shepherd and cowman	43	6	42	0	41	0	40	0	50	48	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
Sheep tender, bullock tender .	42	6	41	0	40	0	39	0	50	48	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
NORTHUMBERLAND AND DURHAM:																				
Whole time shepherd.	49	6	48	0	47	0	—		Customary hours		—		—		—		—	
Horseman, cattleman and stockman	42	6	41	0	40	0	36	0	50	48	12	14	11 1/2	13 1/2	11	13 1/2	10	12
SUFFOLK:																				
Horseman, stockman and shepherd	43	6	42	0	41	0	40	0	50	48	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
WARWICKSHIRE:																				
Stockman, shepherd and horseman	44	6	41	0	40	0	39	0	55	60	10	12	9 1/2	11 1/2	9 1/2	11 1/2	9	11
YORKSHIRE:																				
Horseman, cowman and shepherd	41	0	39	6	38	6	37	6	50	48	11 1/2	13 1/2	11	13	10 1/2	13	10 1/2	12 1/2

The customary number is very variable and differs in different districts in the same county. This method of determining wages was not considered very satisfactory and the later orders define the number of hours per week. This does not mean that any change has been made in the number of hours actually worked; it only makes a change in the hours which are to be considered as overtime. In some counties, where the customary hours are longer than the hours fixed, the minimum weekly wage has been diminished; the worker will not, however, earn less as he will be paid overtime for the additional hours worked.

The short day applies to the special classes of workers; that is to say, any work over 6 ½ hours on that day is considered overtime employment. In some areas all Sunday work is considered overtime, and overtime also includes any work on week-days in excess of the number of hours laid down. These areas are Anglesey and Carnarvon; Berkshire; Cambridgeshire, Huntingdonshire and Bedfordshire; Derbyshire; Dorset; Essex; Hampshire; Lincolnshire; Norfolk; Northumberland and Durham; Suffolk; Yorkshire. In the remaining areas for which minimum wages have been fixed for special classes of workers, the number of hours per week applies to the whole week, including Sundays. Sunday work is not, as such, considered overtime, but all employment in excess of the fixed number of hours per week, whether done on Sundays or week-days, is calculated as overtime employment.

In Norfolk and Suffolk the special classes of workers will not be entitled to payment of overtime wages for any employment in connection with the immediate care of animals, but will be paid at overtime rates for any other kind of overtime employment.

The rates shown in Table III are for the most part those which will come into force on October 6th. Those given for Cheshire and Essex and for whole time shepherds in Northumberland and Durham were previously fixed.

In a few counties minimum wages are in force for special classes of male workers under 18 years of age.

In Northumberland and Durham the minimum wages of horsemen, cattlemen and stockmen (except whole-time shepherds) are 25*s.* if between 16 and 17 and 30*s.* if between 17 and 18 years; the corresponding overtime rates per hour are 6 ½*d.* and 8*d.* for week-day and 7 ½*d.* and 9 ½*d.* for Sundays. In Merioneth and Montgomery the minimum wages of boys who are wholly or partially boarded and lodged by their employers and whose duties include attending to horses or other stock are 12*s.* if under 14 years; 17*s.* if between 14 and 15 years; 21*s.*6*d.* if between 15 and 16 years; 24*s.* if between 16 and 17 years, and 30*s.* if between 17 and 18 years. These relate to a week of 61 hours in summer and 58 in winter. The corresponding overtime rates per hour are 3*d.*, 4*d.*, 5*d.*, 5 ½*d.* and 7*d.* for week-days and 3 ½*d.*, 4 ½*d.*, 6*d.*, 6 ½*d.*, and 8 ½*d.* for Sundays. During the first two months of their employment in agriculture these boys are subject to minimum rates which are 20 per cent. below those indicated.

§ 8. Minimum wages for female workers.

In Table IV we give the minimum wages and overtime rates fixed for women workers.

For the most part a minimum rate per hour has been fixed. Only for female workers in Northumberland employed by the week or longer period have minimum weekly wages been determined.

The minimum rates per hour are subject to a deduction of ½ *d.* per hour during the first three months of a worker's employment in agriculture.

In all parts of England and Wales, all employment on Sunday, all employment on a weekday before 7 a. m. or after 5 p.m. and all employment in excess of 6 ½ hours on the short day is considered as overtime employment. In Cambridgeshire, Huntingdonshire and Bedfordshire, in Cumberland and Westmorland, in Derbyshire, in Devonshire, in Dorset, in Hertfordshire and Middlesex, in Kent, in Northamptonshire, in Nottinghamshire and in Wiltshire, all employment on a weekday in excess of 8 ½ hours in summer and 8 hours in winter is also considered as overtime employment. In Cheshire, in Lancashire, in Shropshire, in Glamorgan and Monmouth and in Merioneth and Montgomery all employment on a weekday in excess of 8 ½ hours all the year round is overtime employment. In all other areas the employment on a weekday in excess of 8 hours all the year round is overtime employment.

For female workers in Northumberland employed by the week or longer period the minimum weekly wages are subject to a deduction of 2*s.* 3*d.* and the overtime rates to a deduction of ½ *d.* per hour during the first three months of a worker's employment in agriculture. The minimum wages are payable in respect of 54 hours per week (excluding Sunday) in summer and of 48 hours per week (excluding Sunday) in winter. Overtime rates are paid for all employment on Sunday, all employment in excess of 6 ½ hours on the short day, and all employment in any week (excluding Sundays) in excess of the hours fixed.

§ 9. Corn harvest wages.

In several District Wages Committee areas minimum rates of wages and special overtime rates have been fixed for workers employed on the corn harvest.

In Cambridgeshire minimum weekly wages have been fixed for a week of 60 hours (excluding Sundays). These are for male workers over 21 years of age, 73*s.*; between 20 and 21 years, 70*s*; between 19 and 20 years, 68*s.*; between 18 and 19 years 66*s.*; between 17 and 18 years, 52*s.*; between 16 and 17 years, 44*s.*, between 15 and 16 years, 36*s.*; between 14 and 15 years, 28*s.* and under 14 years, 20*s.* For female workers the rates are: Over 18 years, 55*s.*; between 17 and 18 years, 41*s.* 6d; between 16 and 17 years, 37*s*; between 15 and 16 years, 32*s.* 6*d*; between 14 and 15 years, 28*s.*, and under 14 years, 23*s.*

Workers in regular employment on the farm who are employed on

TABLE IV. — *Minimum and Overtime Rates for Female Workers.*

Minimum Rate per Hour at Various Ages

County	Over 18	17-18	16-17	15-16	14-15	Under 14
	d.	*d.*	*d.*	*d.*	*d.*	*d.*
Cumberland, Furness District of Lancashire, Westmoreland and Yorkshire (All female workers)	7	5 ½	5	4 ½	4	3 ½
Northumberland (Female workers other than those employed by the week or longer period)	6	4 ½	4	3 ½	3	2 ½
All other counties in England and Wales (All female workers)	6	4 ½	4	3 ½	3	2 ½

Minimum Weekly Wage at Various Ages

	Over 18		17-18		16-17		15-16		14-15		Under 14	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
Northumberland (Female workers employed by the week or longer period)	22	6	20	3	18	0	15	9	13	6	11	3

Overtime Rates per Hour at Various Ages

	Over 18		17-18		16-17		15-16		14-15		Under 14	
	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays	Week-days	Sundays
	d.	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*
Cumberland, Furness Districtof Lancashire, Westmorland and Yorkshire (All female workers)	9	10 ½	7	8	6	7 ½	5 ½	7	5	6	4 ½	5
All other counties in England and Wales (All female workers)	7 ½	9	5 ½	7	5	6	4 ½	5	4	4 ½	3	4

harvest work must be paid at least 24 days at the special rates; for workers engaged for the harvest period, the special rates only apply in respect of hours actually worked on the harvest.

In Yorkshire minimum weekly wages have also been fixed for employment during the corn harvest. For male workers over 18 years the minimum weekly harvest wage is £4; for male workers under 18 years and for all female workers, it is 50 per cent. higher than the normal minimum weekly wage. Where the worker is employed for the whole of the harvest on a farm comprising more than 10 acres of corn, the special rates must be paid for a period of four weeks from the day on which he is first employed on harvest work, even if he is not employed for the whole of this period in harvest work, and after the period has expired, he must be paid at the special rate in respect of each day upon which he is employed on such work. Where the worker is employed on a farm not comprising 10 acres of corn, or is employed for less than the whole period, the special rates shall be payable only in respect of the days on which he is actually employed on harvest work.

In Dorset, Lincolnshire, Nottinghamshire and Oxfordshire, minimum rates per hour are fixed for harvest work. These are set out in Table V.

Special overtime rates for harvest work have been fixed in thirteen areas. Those for male workers are shown in Table VI and those for female workers in Table VII. In all these areas except Cambridgeshire and Yorkshire, overtime employment includes all employment on Sunday, all employment in excess of 6 ½ hours on Saturday and all employment in excess of 9 ½ hours on any other day.

TABLE V. — *Minimum Rate per Hour for Workers Employed on the Corn Harvest.*

District Wages Committee Area	Minimum Rate per Hour for Workers of Various Ages Employed on the Corn Harvest								
	Over 21	20-21	19-20	18-19	17-18	16-17	15-16	14-15	Under 14
	d.	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*
A. *Male Workers.*									
Dorset	10	10	10	10	7	6	5	4	3
Lincolnshire . . .	13 ½	11 ½	11 ½	11	8 ½	7 ½	6	4 ½	4
Nottinghamshire	17	16	16	15 ½	13 ½	11	9	6 ½	5
Oxfordshire . . .	12	12	12	12	7 ½	6 ½	5	4	3
B. *Female Workers*									
Dorset	7 ½	7 ½	7 ½	7 ½	5 ½	5	4 ½	4	3
Lincolnshire . . .	9	9	9	9	7	6	5	4 ½	4
Nottinghamshire	10	10	10	10	9	8	7	6	5
Oxfordshire . . .	9	9	9	9	6	5 ½	5 ½	4	3

TABLE VI. — *Overtime Rates for Male Workers Employed on the Corn Harvest.*

District Wages Committee Area	Overtime Rates for Male Workers of Various ages Employed on the Corn Harvest																	
	Over 21		20–21		19–20		18–19		17–18		16–17		15–16		14–15		Under 14	
	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Anglesey & Carnarvon	14	14	14	14	14	14	14	14	10 1/2	10 1/2	9	9	7 1/2	7 1/2	6	6	4 1/2	4 1/2
Cambridgeshire . .	20	24	19	23	19	23	18	22	14	17	12	15	10	12	8	9	6	7
Cheshire:																		
Head stockmen, head teamsmen and head shepherds . . .	15 1/2	15 1/2	15	15	14 1/2	14 1/2	14 1/2	14 1/2	—	—	—	—	—	—	—	—	—	—
Second stockmen, second teamsman or second shepherds	15	15	14 1/2	14 1/2	14	14	13 1/2	13 1/2	—	—	—	—	—	—	—	—	—	—
Other workers . .	14	14	13 1/2	13 1/2	13 1/2	13 1/2	13	13	9 1/2	9 1/2	8	8	6 1/2	6 1/2	5	5	4	4
Denbigh and Flint.	14	14	14	14	14	14	14	14	10 1/2	10 1/2	9	9	7 1/2	7 1/2	6	6	4 1/2	4 1/2
Derbyshire	21	21	21	21	21	21	21	21	11 1/2	11 1/2	10	10	8	8	6	6	5	5
Devonshire	16 1/2	16 1/2	16	16	15 1/2	15 1/2	15	15	11 1/2	11 1/2	10	10	8	8	6	6	5	5
Dorset	12 1/2	15	12 1/2	15	12 1/2	15	12 1/2	15	9	10 1/2	7 1/2	9	6 1/2	7 1/2	5	6	4	4 1/2
Gloucestershire . .	16	16	15 1/2	15 1/2	15 1/2	15 1/2	15	15	11 1/2	11 1/2	10	10	8	8	6	6	5	5
Herefordshire . . .	16	16	16	16	16	16	16	16	11 1/2	11 1/2	10	10	8	8	6	6	5	5
Lincolnshire. . . .	18	18	15 1/2	15 1/2	15	15	14 1/2	14 1/2	11 1/2	11 1/2	10	10	8	8	6	6	5	5
Somerset	14	14	13	13	12	12	12	12	9 1/2	9 1/2	8	8	6 1/2	6 1/2	5 1/2	5 1/2	4 1/2	4 1/2
Surrey	14 1/2	14 1/2	13 1/2	13 1/2	13	13	12 1/2	12 1/2	9 1/2	9 1/2	8	8	6 1/2	6 1/2	5	5	4	4
Wiltshire	12	12	11 1/2	11 1/2	11 1/2	11 1/2	11	11	8 1/2	8 1/2	7 1/2	7 1/2	6	6	4 1/2	4 1/2	4	4
Yorkshire	23	27	22	26	21	26	21	25	—	—	—	—	—	—	—	—	—	—

TABLE VII. — *Overtime Rates for Female Workers Employed on the Corn Harvest.*

District Wages Committee Area.	Overtime Rates for Female Workers of Various Ages Employed on the Corn Harvest											
	Over 18		17-18		16-17		15-16		14-15		Under 14	
	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days	Week-days	Sun-days
	d.	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*
Anglesey & Carnarvon	11	11	8	8	7½	7½	7	7	6	6	4½	4½
Cambridgeshire . .	15	18	11	11	10	12	9	10	8	9	6	8
Cheshire	9	9	7	7	6	6	5	5	4½	4½	4	4
Denbigh and Flint	11	11	8	8	7½	7½	7	7	6	6	4½	4½
Derbyshire	12	12	9	9	8	8	7	7	6	6	5	5
Devonshire	12	12	9	9	8	8	7	7	6	6	5	5
Dorset	9½	11	7	8½	6½	7½	6½	7	5	6	4	4½
Gloucestershire . .	12	12	9	9	8	8	7	7	6	6	5	5
Herefordshire . . .	12	12	9	9	8	8	7	7	6	6	5	5
Lincolnshire.	12	12	9	9	8	8	7	7	6	6	5	5
Somerset	9	9	8	8	7	7	6	6	5½	5½	4½	4½
Surrey	10	10	7½	7½	6½	6½	6	6	5	5	4	4
Wiltshire .	9	9	7	7	6	6	5	5	1½	1½	4	4

In Dorset there is a special definition of overtime for stockmen, horsemen and shepherds employed on harvest work; it is all employment in excess of 6 ½ hours on Saturday except time spent on that day in connection with the feeding and cleaning of stock and all employment on any day in excess of the hours of employment customary in the area for workers of this class.

In Cambridgeshire overtime does not begin on days other than Sunday and Saturday until 10 hours have been worked.

In Yorkshire special overtime rates were fixed only for male workers over 18 years of age. To other workers the normal overtime rates apply. For all workers, however, overtime employment during the harvest period is defined as being all employment on Sundays and all employment on weekdays before 6.45 a. m. and after 8 p. m or (when only cutting or stooking work is in progress) after 7 p. m.

In Suffolk another system has been adopted. It is laid down that during the period of corn harvest no employment on harvest work on a weekday shall be treated as overtime employment, and every worker shall be paid ordinary wages, but shall be entitled to a bonus on the completion of the harvest. This bonus in the case of male workers, according to age, will be : Over 21 years, £7 10*s.* ; between 20 and 21 years, £7 4*s* ; between 19 and 20 years, £7 ; between 18 and 19 years, £6 16*s.* ; between 17 and 18 years, £5 7*s.* ; between 16 and 17 years, £4 10*s* ; between 15 and 16 years, £3 14*s.* ; between 14 and 15 years, £2 17*s.* 6*d.* ; under 14 years, £2. For

female workers the bonus will be: Over 18 years, £5 10s; between 17 and 18 years, £4 3s; between 16 and 17 years, £3 15s.; between 15 and 16 years £3 5s. between 14 and 15 years, £2 15s.; under 14 years, £2. A worker who has only worked a part of the harvest period will only be entitled to a corresponding proportion of the bonus.

The hours to be worked during the harvest in Suffolk will, if required, be not less than 12 hours on any weekday while the crops are being carted and not less than 11 hours on any weekday while other harvest work is in progress. All employment on harvest work on Sunday will be paid for at the rates for Sunday work normally applicable to the worker.

HOLLAND.

THE WAGES OF RURAL LABOUR.

SOURCES:

ALGEMEEN OVERZICHT VAN DEN ECONOMISCHEN TESTAND DES LANDARBEIDERS IN NEDERLAND (*Considerations on the Economic Condition of Agricultural Labourers in Holland*), publication of the government commission instituted by royal decree of 20 June 1906, No. 72. The Hague, Gebrs. J. en H. van Langenhuysen, 1908.

VERSLAGEN EN MEDEDEELINGEN VAN DE DIRECTIE VAN DEN LANDBOUW (*Reports and communications of the Direction of Agriculture*), ibid, years 1916, 1917 and 1918, Part 3, pages LXVI, LXIV and LXII, respectively.

RAPPORT VAN DE ARBEIDSCOMMISSIE VAN DE VEREENIGING VAN NEDERLANDSCHE AKKERBOUWERS (*Report of the Labour Commission formed by the Dutch Farmers' Unions*), published in the "Nouwe Rotterdamsche Courant" of 15 April 1919 (evening edition) and 16 April 1919 (morning edition).

In 1906 a royal order entrusted to a government commission an enquiry into the economic condition of Dutch rural labourers. In this country, generally taken to be eminently commercial, the peasants form a very important class numerically (1).

After nearly two years this commission presented to the government a series of volumes of which one is concerned with wages. The statistics it contains are no longer quite recent, but it is nevertheless possible to take them as the basis of a comparative study, for in 1905 the wages of agricultural labourers were not much lower than in the last years before the war. The consequences of the crisis in which Dutch agriculture was involved about 1880, owing to the nascent competition of American produce, consequences which included an important fall in wages, had been overcome in

(1) In 1880 out of a total population of 5,104,137, 571,942 were agriculturists, 646,745 were employed in manufacturing industries, and 318,888 in trade and banking. In 1909 the corresponding figures were 5,858,175 — 616,395 — 782,382 — 409,570.

1900. From this time wages surpassed the level they had reached before the crisis and showed a continuous tendency to rise, owing to the increased yield of agriculture and the competition of other and better paid industries. But although this increase was general, the great difference between different parts of the country obliges us to give detailed data with regard to it. In 1905 the commission produced, as the result of its enquiry, the following table in which sums of money are expressed in florins.

The data as to the continuous rise of wages between the time of the crisis and 1905 were not very definite, but the commission which we have mentioned was able to ascertain the following general figures :

Groeningen (wages were comparatively high before 1880)	25-50 per cent.	Utrecht about	100 per cent.
		Holland	30-50 » »
Frisia	25-35 » »	Zealand	25-30 » »
Overyssel (agricultural district)	100-125 » »	Brabant and Limbourg	30-50 » »
Gruebre (Betuwe)	50 » »		

Since 1906 the continuous and regular development of Dutch agriculture has prevented the need for carefully compiled statistics as to the wages of rural labour. For the period of the war we have found nothing we can quote except the much summarized data in the annual reports made to the government, dated 1915-1916 and 1917.

In 1915 it was found that the mobilization of the army emptied the labour market to a considerable extent and caused a general increase of 20 per cent. or more in wages.

In the next year, 1916, there was another increase of about 20 per cent. in spite of the frequent leaves given to soldiers in order to facilitate fieldwork and in spite of the help obtained from interned Belgians. In that year the deputy H. Bs. Westerdijk, formerly president of the 1906 government commission, published a typical budget of an agricultural labourer's family in the province of Groeningen, in which receipts from 1911 to 1916 were compared with expenditure in 1912 and 1916.

The annual wages of the head of the family were :

457.77	florins in 1911	571.625	florins in 1914
495.115	» » 1912	619.12	» » 1915
535.99	» » 1913	798.16	» » 1916

In 1916 the increase in earnings since 1912 was thus 303.045 florins or 61.2 per cent. The family's expenditure was 533.75 florins in 1912 and

Agricultural Wages in Holland in 1905 (in florins)

Provinces and districts	Men employed within the farm by the year (plus board)	Women employed within the farm by the year (plus board)	Permanent labourers by the year	Permanent labourers by the year	Fixed wages: casual labourers by the day, at ordinary times	Fixed wages: casual labourers by the day, during harvest	Fixed wages: casual labourers by the hour, at ordinary times	Fixed wages: casual labourers by the hour, during harvest	Piece work paid for at fixed rate: casual labourers by the day, at ordinary times	Piece work paid for at fixed rate: casual labourers by the day, during harvest	Piece work paid for at fixed rate: casual labourers by the hour, at ordinary times	Piece work paid for at fixed rate: casual labourers by the hour, during harvest
Groeningen:												
Hunsingo	200–240	110–150	400	400	0.80–1.75	1.50–2.00	0.10–0.15	0.15–0.20	1.25–1.90	1.75–4.50	0.13–0.18	0.175–0.45
Fivelingo	200–240	100–140	350–400	350–425	0.75–1.50	1.25–2.00	0.095–0.125	0.125–0.20	1.25–1.75	1.80–3.50	0.125–0.175	0.18–0.37
Woldstreek	150–225	80–125	265–400	300–430	0.75–1.25	1.00–2.00	0.10–0.125	0.18	1.00	2.00	0.125	0.20
N. Westerkwartier	170–200	80–105	326–400	300–350	0.80–1.50	1.50–2.00	0.10–0.15	0.15–0.20	—	2.00–3.50	—	—
Z. Westerkwartier	130–180	70–80	234–260	275	0.50–1.00	—	—	—	—	—	—	—
Klein Oldambt	130–200	80–110	300–400	315–400	0.60–1.25	1.50–1.75	0.10–0.15	0.125–0.15	1.00–1.50	1.35–2.50	0.10–0.175	0.15–0.25
Oldambt	130–200	80–120	250–400	280–420	0.60–1.25	1.50–1.75	0.09–0.125	0.125–0.15	—	2.50	0.10–0.175	0.15–0.25
Westerwolde	140–200	70–120	350	± 400	0.60–1.50	—	0.08–0.12	—	—	1.50	—	—
Veenkolonien	170–200	80–90	350–375	350–400	0.80–1.25	1.40–1.55	0.09–0.12	0.13	0.75–1.25 0.50–2.50 (turf-digging)	1.50–1.75	0.085–0.13	0.15–0.16
Frisia:												
Bouwstreek	120–200	80–125	300–425	275–400	1.00–1.30	1.50–2.50	0.10–0.13	0.12–0.20	1.10	2.00–3.50	—	—
Greidstreek	200–250	100–150	400	350–450	1.10–1.80	—	0.10–0.15	—	—	2.50–3.50	—	—
Zand-en Veenstreek	160–200	100	260–375	—	0.60–1.25	—	—	—	1.50–2.00	—	—	—
Drenthe:												
Zandstreek	95–240	60–100	200–360	220–300 and a plot of land	0.60–1.10	1.25–3.00	0.10	0.14–0.15	—	2.00–4.00	—	—
Veenstreek	100–225	50–120	285–400	300–500	0.75–1.25	—	—	—	—	1.50–3.00	—	—
Overyssel:												
Vee-hovi-en Ysselstreek	50–250	40–160	350–400	200–470	0.60–2.00	2–3	0.10–0.15	0.25	0.80–1.30	1.80–2.50	0.09–0.13	—
Zandgedeelte	70–200	40–150	150–365	210–468	0.60–1.00	1.50–2.50	0.10 0.12	0.12–0.18	0.50–1.20	1.60–5.00	0.09–0.12	0.12–0.18
Hooge en lageveenstreken	80–200	50–100	210–500	130–425	0.50–1.25	1.25–2.00	0.09–0.12	0.12–0.20	0.50–1.25	1.25–2.50	0.09–0.12	0.18–0.20
Gelderland Twenthe	60–250	90–120	300	380–450	0.80–1.10	1.30–2.30	0.08–0.15	0.12–0.20	—	—	—	—
Gelderland Graafschap												
Veluwe	100–200	80–150	250–350	250–350	0.60–1.25	2.00–2.50	—	—	0.90–1.10	1.00–2.60	0.09–0.12	0.10–0.20

Utrecht	100–260	80–200	250–500	—	0.80–1.25	2.00–3.00	—	—	—	2.00–3.00	—	—
North Holland:												
Noorderkwartier	100–260	75–180	400–500	350–500	1.20–1.25	1.50–2.00	0.12–0 125	0.20 and more	1.50–2.00	2.50–3.00	0.125–0.15	0.15–0.25
Noordzeekanal Alkmaar-Horn ten Zuiden van Noorzeekanal.	120–300	75–280	350–600	300–620	1.00–1.50	1.50–4.00	—	—	1.20–3.00	2.00–4.00	—	—
South Holland:												
ten Noorden van den Rijn												
Delfland in Scheland	200–300	60–200	365–520	400–600	1.00–1.50	1.10–2.50	—	—	—	—	—	—
Polders	100–300	100–200	364–624	425–520	1.25–1.50	1 20–2.50	—	—	—	—	—	—
Gouda, Woerden in Krimpenerwaard	120–250	100–200	300–465	400–420	1.00–1.30	2.50–3.00	—	—	—	—	—	—
Westland	180–300	100–180	400–500	400–550	1.20–2.00	2.00–2.50	0.12–0.20 (horticulture)	0.20	—	—	—	—
Alblasserwaard	140–200	120–200	300–375	—	0.90–1.40	1.50–3.00	0.12–0.13 (agriculture)	—	—	—	—	—
Hoehsche Waard	150–200	80–120	300–400	250–400	0.90–1.25	—	0.10–0.125	—	—	1.50–2.00	—	—
Overflakkee	130–170	60–100	250–375	200–325	0.70–1.50	—	0.10–0.18	0,20	—	1.50–2.25	—	—
Ysselmonde	100–250	60–140	400–500	300–400	1.00–1.50	—	0.10–0.12	—	—	1.20–2 50	—	—
Voorne-Putten	200–250	100–150	300–400	200–250 and a plot of land	1.00–1.50	—	0.08–0.15	—	—	1 00–2,50	0.15	—
Zealand:												
Zeeuwsch-Vlaanderen	150–250	60–150	250–300	do	0.75–1,25	1.50–2.00	0.075–0.125	0.15–0.20	1.00–1.50	1.50–2.50	0.10–0.15	0.125–0.20
Walcheren	100–150	60–100	300–3[illegible]0	do	0.90–1.25	1 00–1.50	0.09–0.125	0.10–0.15	1.00–1.25	± 2.00	0.10–0.125	—
Zuid-Beveland	125–190	6c–100	275–350	do	0.90–1.50	1.50–2.00	0.09–0.15	0.15–0.20	1.00–1.50	1.50–2.50	0.10–0.15	0.125–0.20
Noord-Beveland	90–150	50–80	250–350	do	1.00–1.50	2 00	0.10–0.15	0.20	1.00–1.50	1.50–2.50	0.10–0.15	0.125–0.20
Schouwen-Duiveland	125–150	60–100	250–350	do	0.80–1.20	1.50–2.00	0.08–0.12	0.15–0.20	1.00–1.50	1.50–3.00	0.10–0.15	0.125–0.25
Tholen-Sint Philipsland	150–200	60–100	250–300	do	0.75–1.20	1.00–1.50	0.075–0.12	0.10–0.15	1.00–1.50	1.25–2.50	0.10–0.15	0.10–0.20
North Brabant:												
Hollandsch Diep-Volkerab	150–200	80–110	275–400	200–440	0.70–1.00	—	—	—	1.00–1.50	3.30	0.10–0.15	—
Altena-Biesbosch	100–200	60–100	250–400	250–400	0.80–1.50	—	0.10–0 13	—	—	1.50–2.50	—	—
Langstraat	100–190	50–120	300–416	280–400	0.80–1.50	1.25–2.00	0.10	—	1.10–2.50	—	—	—
Breda	150–180	80–100	300	—	0.85–1.00	1,50–1.75	—	—	1.00–1.25	2.00 -2 50	—	—
Rozendaal-Bergen op Zoom	120–200	60–140	275–375	150–300	0 70–1.00	1.25–1 75	—	—	—	—	—	—
Schelde	180–225	120–150	270	225	0.90–1.00	1.25	—	—	—	1.50–2.50	—	—
Zandstreek in het Zuiden	120–180	80–120	± 270	—	0.80–1.20	—	—	—	—	—	—	—
East district	± 125	60–125	± 270	250–350	0.60–3.00	1.75–3.00	—	—	0.80 and more	1.50–3.50	—	—
Limburg	100–250	70–225	200–400	—	0.80–1.25	1.20–1.75	—	—	—	1.50–3.00	—	0.12–0.20

817.515 florins in 1916 (1). The increase in expenditure was therefore 283.765 florins or 53.4 per cent.

In 1917 there was a further rise of wages. They often reached the double of what they had been before the war, but on the other hand the number of the unemployed increased and the number of days of work diminished.

A general view of the financial position of the labourers about the beginning of 1918 was afforded by a commission instituted by the Dutch Farmers' Union with a view to an enquiry as to wages and hours of work in agriculture. This commission has published a résumé of the data it collected. The fact was ascertained that permanently employed labourers worked in the previous year for from 2,500 to 3,200 hours, rainy days included, stockmen generally for more. Calculating wages on the payments generally received, it was found that the annual wages of permanently employed labourers were from 600 to 1000 florins, or on an average 800 florins. Stockmen earned on an average from 100 to 200 florins a month. When they live on the farm they are paid from 400 to 600 florins in cash, are fed and often have their washing done for them. The casual labour, employed only for a few days a week or at times when there is extra work to be done, is, if wages are calculated by the hour, a little better paid than the permanent staff. Seasonal labourers, who generally work by the piece, received from 3 to 7 florins a day according to their trades. In 1918 from 3 to 5 florins were paid for the weeding of beetroot fields and as much as 7 florins for potato lifting, while mechanics employed on steam threshing machines received half a florin an hour.

If the general rise in prices be taken into account, it may be concluded that these wages are not unduly higher than those of 1905-8.

It is not at all easy to foresee what changes the peace will bring about, but since there is only a very small fraction of the Dutch rural population which is revolutionary, wages will not rise much above their normal level.

PORTUGAL.

NEW PROVISIONS FOR CONSOLIDATION OF HOLDINGS

OFFICIAL SOURCE:

Diário do Governo, 10 May 1919.

On 10 May of this year the Portuguese government published a decree which makes definite provision for the redistribution in self-contained properties of parcels of rural land scattered in one district and belonging to the same owner.

(1) In 1916 this family could spend more than its head earned because it received money from other sources.

According to this decree a redistribution of parcels should affect an area contained as far as possible within fixed and natural boundaries and not more than 300 hectares in extent. In carrying out consolidation care should also be taken that each owner receive, in as far as possible, land of equal value to that he formerly held and able to bear the same crops, that his new property be situated, preferably, in a central position with regard to the lots he previously held, that its form be favourable to agriculture, and that it have convenient and permanent ways of access.

An important provision of the decree establishes that such formation of properties as gives rise to the payment of compensation in cash, when parcels are exchanged, should as far as possible be avoided. But anything which increases the eventual value of the parcels in question, such as the improvement of fruit-tree plantations, etc., may give rise to the payment of such compensation.

When parcels of land constitute special sources of profit for their owners, and a loss therefore arises when others are substituted for them, they are to be assigned to their former owners unless this be contrary to the general interest. In any case an owner will have the right to retain the parcel on which the house he inhabits and has occupied for more than a year is situated.

The consolidation of holdings in a district may be declared compulsory only if two thirds of the owners of two thirds of the land of this district ask that the process take place and if it have been authorized by the Minister of Agriculture. Such authorization may be granted only if the redistribution affect land homogeneous in character and if it make the improvement of farming possible.

The redistribution of parcels belonging to two or more owners may also be undertaken at the request of all those interested, if no parcel affected by the redistribution exceed one hectare in area.

For the actual process of consolidation an executive committee is appointed. It consists of five members elected by the landowners of the district in which the consolidation is to take place and of an expert land-surveyor and an agricultural engineer. This committee must . .

(*a*) fix the exact boundaries of the land to be redistributed and to receive boundaries;

(*b*) indicate the roads, irrigating canals etc. to be preserved;

(*c*) indicate the new ways of communication to be established;

(*d*) indicate the lands to be excluded from the process as being in common use;

(*e*) draw up tables showing the quality of and classifying the lands to be redistributed;

(*f*) establish tariffs for the valuation of parcels;

(*g*) decide in the first resort on claims made by those interested.

All those interested are by public notice invited, thirty days in advance, to be present at the determination of the boundaries of their parcels.

Those interested or, in lieu and place of them, their legal representatives, will obtain, in return for a receipt, a note of the parcels of land in

which they are interested, and the correspondent calculation of valuations and compensations.

To decide on the claims of those interested a court of arbitration will be constituted. It will have three members, of whom two will be nominated, respectively, by the executive committee and the claimant, while the third, who will act as chairman, will be chosen by the district judge.

The keepers of the land register or cadaster must register the new properties formed in consequence of processes of consolidation, together with all charges and terms, and must show in a table facing the entry of registration the configuration of the parcels of which the new properties have been formed.

Finally one of the most important clauses of the decree provides that the owners of the new properties will be exempt from payment of the land tax for three years from the date of the consolidation.

MISCELLANEOUS INFOMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES

BRAZIL.

A MEASURE FOR EXTENDING WHEAT GROWING IN BRAZIL. — A. LAVONZA in *Boletin de sociedade nacional de Agricultura* Rio de Janeiro, Nos 3 and 4, 1918

In order to extend wheat growing in the United States of Brazil there was promulgated on 6 March 1918 a legislative decree which grants prizes, in the form of agricultural machines worth 30,000 réis per every cultivated hectare, to farmers, farmers' unions and agricultural co-operative societies who give themselves up to wheat growing in the years 1918 and 1919.

It is well known that in Brazil, and more especially in recent times, wheat has constituted one of the chief sources of economic wealth, because it is a crop easily adapted to all soils and to diversities of climate, and because the federal government has encouraged farmers to grow it, providing, for example, for a free distribution of seeds of the wheat already known and cultivated in Brazil as being strong and able to resist heat and drought and the various eventualities which befall this crop. Nevertheless, since home consumption within Brazil ensures the marketing of a far greater quantity of wheat than that now grown, and since the state of the world's market for wheat is such as to make peculiarly profitable not only the present but also future crops, a measure which encourages extended wheat-growing and reduces the expenses which fall on the farmer when each new crop is being put in, will indubitably have more effective results than the earlier measures granting facilities in this sphere. These earlier measures fix grants to be bestowed only on persons who have grown wheat on an area exceeding 200 hectares, and do not take yield or the quality of the crop into account.

The provision we are examining deserves the more consideration because it refers to agricultural operations accomplished by mechanical means. In a country of extensive territory and sparse population like Brazil, in which the movement of immigration has been arrested by the war, it should be recollected that a slightly increased use of agricultural machinery would be a most effective means of lowering the high wages due to a lack of labour and of obtaining at the same time a larger yield.

We will now briefly resume the chief provisions of the decree. It has first the provision noted in our opening paragraph. The prizes in question are to be delivered to the farmers after the least possible interval of time when once the agents of the federal government have ascertained that the annual yield obtained by the farmer concerned is not less than 15 hectolitres of wheat per hectare sown, and that the weight of his ripe and dry grain is not less than 78 kilogrammes per hectolitre. If the yield exceed 200 hectolitres a hectare, and the grain weigh more than 78 kilogrammes per hectolitre, the value of the prize will be increased by 20 per cent.

Farmers' unions and societies wishing to compete for these prizes must intimate the fact to the Ministry of Agriculture, Industry and Trade which will make a note to such effect in the proper register, specifying the situation of the property in question and the area which it is proposed to cultivate.

The decree also established that the Ministry of Agriculture should have the wheat planting of the noted competitors supervised by agricultural inspectors and other skilled officials of the ministry. Competitors should facilitate these inspectors' visits to fields, granaries, silos etc., grant them the necessary staff and material for surveying the cultivated area, and give them information as to the kinds of seed used, methods of ploughing followed, manures employed, precautions taken against insects and disease, in fact as to everything necessary to obtaining a knowledge of the crop and determining its probable yield.

The agricultural inspectors and other skilled officials in their turn supply the farmers with practical instructions as to the preparation of the soil, quality, choice of seeds, the best methods of sowing and growing wheat and the use of agricultural machinery, and they suggest remedies to be used in combating diseases of crops and the bests means and methods of gathering, drying, threshing, preserving and storing the harvested grain, and arrange to give the farmers the information each of them needs in order that right methods of cultivation may produce the best possible yield.

Whoever refuses to give needed assistance or information to the agricultural inspectors, or in any way places obstacles in the way of the discharge of these officials' duties, will lose his rights to the prizes offered.

In order to ascertain the yield of the crop of each competitor and to determine the density of the harvested wheat, the inspector will at a fit time visit the property of competitors, value the total yield, per hectare, of the crop, and award a certificate; and will then take some samples of the wheat which he will transmit to the Ministry together with a detailed report, for necessary verification.

Whenever a farmer, union or agricultural co-operative society opposes the execution of any measure of inspection established by the decree, because the farmer or body in question has recognized that he or it is not in a condition to compete for the prize, the inspector or his substitutes will desist from the inspection, notifying the Ministry of Agriculture.

When these communications and samples have been received, the Ministry of Agriculture will compile a summarized report containing the names of winning farmers, unions and agricultural co-operative societies, showing the State and municipality concerned, the area and kind of wheat, the time of sowing and harvesting, the yield, quality and density of the crop. The greatest possible publicity should be given to this report.

Finally, the decree provides that in the first quarter of 1919 there will be an exhibition of wheat, other cereals and dried leguminous plants and of their derivatives and connected industries.

By the decree in question the federal government fixed the minimum prices of wheat in 1918 and 1919 at 300 réis a kilogramme in Rio de Janeiro.

ITALY

THE FORTY-NINTH NATIONAL AGRICULTURAL CONGRESS. — *Bollettino della Società degli Agricoltori Italiani*, N° 1, Rome, May 1919.

On the initiative of the Society of Italian Agriculturists, which groups about 5,000 members, the Forty-Ninth National Agricultural Congress was held in Rome from 27 February to 2 March. Important technical and economic questions were discussed and the general lines were traced of the new work which Italian agriculture must undertake during the passage from a state of war to one of peace. We will briefly resume the resolutions bearing on the questions most interesting to us.

Agricultural Organization and Chambers of Agriculture. — In this connection the congress resolved that in each province *chambers of agriculture* should be introduced as autonomous bodies to represent all agricultural interests in their respective provinces and to act as local agencies decentralizing the functions and activity of the Ministry of Agriculture. These chambers should be constituted by means of nominations in the second degree by the agricultural trades unions in the provinces, and should be equally representative of the interests of landowners, farmers and labourers. Like the provincial administrations and the chambers of commerce they are able to finance themselves because they have the right to levy rates. Compulsory arbitration as to questions touching agricultural contracts will be organized in connection with these chambers. The local organization of agricultural insurance will be co-ordinated with the work of the chambers, the advice of the agricultural associations being taken in this matter.

(1) See the report of the president (Rava), in the name of the board of management, for 1918. Società degli Agricoltori Italiani, Rome, 1919.

The latifunda and the diffusion of small and medium-sized holdings or rural leaseholds. — In view of the importance and the gravity of the problem of the latifundum, a problem which varies with districts and of which the solution is urgent, a resolution was passed which favoured the diffusion of medium-sized and small holdings, and supported, as the best means of reaching the desired end, the encouragement and completion of private initiative.

Agricultural Improvement. — Resolutions were passed in favour of the existing laws on agricultural improvement being urgently applied by government, and of the institution, for this end, of an Institute of Credit for Improvements, of Consortia for Agricultural Improvement, even if these be only voluntary, and of other coercive action for the effective and urgent application of the measures necessary to the increase of agricultural production.

Irrigation. — In this connection a resolution was passed which was intended to provoke immediate and direct State intervention for the solution of the problem of irrigation in the southern districts. Demands were made : (*a*) that the most practical and efficacious means of constructing in a short time the greatest possible number of medium-sized and small works of irrigation should be discovered ; (*b*) that the company which is constructing the aqueduct of Apulia should, in agreement with the State, claim to construct the large reservoirs which have been planned for Apulia with a view to rescuing this district from the inferior economic condition in which it is placed by its scarce and ill-distributed rainfall.

Agricultural Credit. — A resolution was passed in favour of the prompt unification of existing legislation on agricultural credit, whether credit for normal farming operations or for improvements ; in favour of the maintenance and strengthening of existing district credit associations ; and, finally, of the institution of a great *Istituto nazionale di credito agrario* (National Institute of Agricultural Credit), endowed with a large initial capital.

Fruit Growing and Horticulture. — Resolutions were passed in favour of instituting experimental gardens and orchards, and posts of observation and lectureships which would make Italian production increasingly profitable, in favour of applying the law against the diseases of plants and fruit by promoting communal consortia on a mutual basis which would provide the means of making this law really effective, in favour of improving the railway service, etc.

UNITED STATES.

1. CROP AND LIVESTOCK LEASES IN MINNESOTA. — *The Grain Growers' Guide*, Winnipeg (Canada), 19 March 1919.

In parts of Minnesota a form of farm lease known as " the crop and livestock lease " is growing in favour.

In a lease of this kind, the tenant agrees to furnish all labour, workhorses, machinery and implements necessary for operating the farm. He

also undertakes to sow and plant such crops as are agreed upon between the parties, but in case of disagreement the owner has the right of final decision. The tenant markets all crops, stock and livestock products free of all charge to to the owner.

The owner agrees to furnish the seed necessary for the crops, and to pay half the cost of binder-twine and of the threshing. He also agrees to furnish one half of such number of brood sows, young cattle, feeding cattle and sheep as may be decided upon, as well as all dairy cows and a pure-bred bull. He provides half the feed and all the pasture required for the live-stock kept, except poultry. He pays the services fee for all mares bred from, and receives half interest in the colts raised. He pays one-half the cost of a cream-separator, where one is needed. If the farm is equipped with a silo, the owner furnishes the silage cutter and the power for operating it. He pays all the real estate taxes and the insurance on buildings, besides one-half of the insurance on chattels owned in common with the tenant.

The two parties agree that each shall own half share of all crops, live-stock and livestock products produced, and that the proceeds of all sales shall be divided equally, except in the case of work-horses and poultry, which are owned entirely by the tenant.

In case the owner and tenant fail to come to an understanding in regard to any clause of the lease, or in regard to the division of the property jointly owned, the matter in controversy is referred to three arbitrators, one selected by the tenant, one by the owner and the third by the two so chosen. Both parties agree to abide by the decision of the arbitrators.

Some of the clauses are at times varied. For example, where a number of dairy cattle are kept, some owners pay for a part of the hired labour required. Some landlords ask the tenant to furnish half the seed, in return for which they supply half the feed for the work-horses.

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2. THE LARGE HOLDINGS OF SOUTHERN CALIFORNIA. — *A Report on Large Landholdings in Southern California*, issued by the Commission of Immigration and Housing of California, Sacramento (California) 1919; *The Annual Report of the Commission of Immigration and Housing of California*, Sacramento, January 1919.

The territory of the eight southern counties (1) of the state of California can be analysed as follows:

Total area of the eight counties	28,919,680	acres.
Aproximate estimate of area which might eventually be cultivated	4,242,227	»
Irrigated area	745,486	»
Irrigable area	1,949,600	»
Area not in public ownership nor owned by railways	4,587,581	»
Of this last the improved land covers	1,862,791	»

(1) Santa Barbara, Ventura, Los Angeles, Orange, San Diego, Riverside, San Bernardino, Imperial.

The following figures give an idea of the division of land:

Size of Holdings	Number	Acreage
More than 2,000 acres and less than 10,000 acres	222	853,403
» » 10,000 » » » » 15,000 »	20	193 808
» » 15,000 » » » » 50,000 »	25	639,483
» » 50,000.: Lands belonging to the *Southern Pacific Railway*	5	2,598,775
Other lands	7	608,346
Total holdings of more than 2,000 acres	279	4,893,915

Of the four and a half million acres which are neither in public ownership nor held by railways about 50 per cent. are owned in about 250 holdings. Of the seven holdings of more than 50,000 acres each not belonging to the railway, the area of one is 183,199 acres, that of another 101,000 acres.

The large holdings in Southern California, except those in Imperial County which has been settled only since 1900, are mainly an inheritance from Spanish Mexican times. Many of the enormous concessions of that period have been divided or reduced in size; but few have been broken up into small holdings; some have remained virtually intact; and in certain cases two or more have been joined to make one immense holding. The major part of each of these ancient grants is, in most cases, still a large holding in the possession of an individual, a family or a corporation.

There have been enough fragments broken off from the original estates to allow, together with lesser independent areas, both the formation of most of the small holdings and the building up of new large holdings. In Imperial County there have been only seven accumulations of holdings which have attained to an area of 2,000 acres each, and the average size of farms has diminished. But in the other counties, while a demand for small holdings has caused a breaking up of estates near towns, there have also been the accumulations which have formed a considerable number of new extensive properties.

The following are the principal types of large holdings found:

(1) An estate which is the ancestral inheritance of an old Californian family. Some of the land is cultivated, but not to be best advantage, and the estate is held together by family sentiment. There are instances of the succession of Americans to estates of this type.

(2) An estate owned by a company which farms by modern methods. Such an estate is in some cases over capitalized and over systematized and managed at a loss, but in others it is efficiently and profitably farmed.

(3) A tract of land almost wholly given up to stock raising.

(4) A tract of land intended to be divided and sold in lots. Sometimes it is farmed pending division or sale; sometimes it is intended to be sold when the water resources have been developed but no other improvements have been effected; sometimes fruit or nut-trees are planted on it with a view to its sale in small lots.

(5) An estate of which a small part is directly farmed by the owner while the remainder is held by leases which impose rigid restrictions.

(6) The holding of a bank, a speculator in land or a trust company made up of many scattered tracts.

The proportion of tillable land believed to be included in the large holdings is as follows:

	Total acreage	Tillable acreage	Percent. of acreage which is tillable
Large holdings except the lands of the Southern Pacific Railway	2,295,140	666,886	29
Large holdings owned by the Southern Pacific Railway	2,598,775	225,224	8.6
All large holdings	4,893,915	892,110	18.2

It is seen that less than 10 per cent. of the land of the railway holdings is tillable. Most of this property is anything but agricultural land and large areas of it cannot even be used for grazing. It includes however several tracts of fertile land which either have or could have a water supply. Except for two holdings all these lands of the railway are entirely unimproved.

In all the large holdings taken together a very considerable tillable area is lying idle and it might be increased by a further development of water resources and the application of scientific methods of farming. A survey made by the local Food Administration in the summer and autumn of 1917 discovered that while 64,763 acres in San Diego County, outside the railway holdings and publicly owned lands, were under cultivation, 62,571 acres of tillable land were lying idle. Of the latter area 39,011 acres were cleared but not irrigated and the remaining 23,560 acres could easily be cleared. It was stated that water was available for 4,812 acres and could readily be made available for other 21,317 acres, leaving 36,442 acres for dry farming. The greater part of these idle lands were evidently contained in the large holdings. In Los Angeles County an enquiry made in the autumn of 1917 for the County Council of Defence showed that there was an irrigated area of 222,041 acres and an area of 221,212 acres under dry farming, or a total cultivated area of 443,253 acres. Of the untilled land it was estimated that 286,331 acres might be dry farmed while water might immediately or eventually be supplied for 358,719 acres. Even allowing for some exaggeration in this estimate of idle tillable land, the situation revealed is deplorable. The greater part of the unused area is unquestionably comprised in the large holdings. Reports to the State Agricultural College in April 1917 stated that of land then unused 4,000 acres in Los Angeles County, 30,000 acres in Riverside County and 5,000 acres in San Bernardino County could be profitably ploughed for summer fallow, and

that irrigation in Southern California could easily be extended to an additional 100,000 acres.

Large holdings do not lend themselves to intensive cultivation. An expert asserts that 18,000 acres on one geat ranch in Orange County, now dry farmed, could be watered from existing wells and converted into land of the most valuable kind, and the agents who made the agricultural enquiry of April 1917 raised this estimated to 25,000 acres. As to a marshy tract of 6,900 acres in the same county it was estimated that 5,000 acres could be made tillable by proper drainage. Similar instances are found in other counties.

The large holdings are cultivated either by the owner directly by means of wage-earning labourers, or in lots by tenants of the owner. Different factors cause one or other of these systems to be followed, and it is by no means the rule that the largest properties are let out to tenants. Thus in Imperial County, where large holdings are few and the most extensive of them is less than 6,000 acres in area, the system of tenant-farming is more prevalent than anywhere else in Southern California and is on the increase. The reason lies in the climate, which induces absenteeism in the landowners, in the constant influx of impecunious farmers from the south and in the great productivity of the soil which makes high rents. In Ventura County, on the other hand, where there are many large holdings, the owner prefers to farm his land himself employing labourers, as he believes that he thus obtains the greatest returns. The system of cultivation by means of hired workers produces a demand for casual unskilled labour, largely supplied by the immigrant population with which we deal elsewhere (1).

Much of the land in these great holdings is not for sale under any conditions ; some of it is for sale in tracts so extensive as to be beyond the reach of men who wish to make productive use of it ; and the price usually makes it inaccessible to a prudent intending farmer. A temporarily sluggish market and poor demand do not reduce prices, because the large holdings are owned by men who can afford to wait.

Much land has been and is being sold by illegitimate or even fraudulent advertisement ; prices are too high ; and conditions of payment are unfavourable to settlers. For the whole question of speculation in land, the price of land and the conditions of paying such price, as affecting land settlement in California, we refer the reader to our issues for April and September 1917 (2).

The Commission of Immigration and Housing of California, from whose report we have taken our data, makes some suggestions for the improvement of the conditions of land tenure in Southern California.

The Commission recommends in the first place that there should be a formal declaration by the State of a land policy. This would provide a guide and standard for legislation. Its aim should be " an immense increase

(1) See our issue for December 1917, pages 66-73, and pages 578-81 of this issue.
(2) See our issues for April 1917, page 1908, and September 1917, page 59.

in the number of tillers of the soil and the creation of a prosperous and secure rural society ".

Secondly the Commission recommends " a genuine co-ordination of every bureau, commission or other State agency having to do with rural land and the supply of water. " It points out that confusion arises from the independent powers now held by the Surveyor General, the Land Settlement Board and Agricultural College, the State Water Commission, the State Reclamation Commission and the Irrigation District Bond Commission.

Thirdly the Commission asks for legislation which would oblige the county assessors annually to collect and tabulate statistcs as to the size of farms, the number of landholders and other points relevant to agrarian conditions. There is at present a regrettable lack of exact statistics on these subjects, and the difficulties in the way of compiling them are nearly insurmountable. All those interested in keeping conditions unchanged have opposed publicity, and the data which the assessors are obliged to supply to the State are consequently so meagre as to be almost valueless for the purpose of forming a general opinion on the agrarian situation. Ample and detailed statistics with regard to landed property are absolutely necessary if the State is to undertake land reform.

Finally the Commission reviews and discusses several suggestions for breaking up the large holdings and making land available for settlement by expedients of taxation.

***

3. THE WORK DONE FOR FOREIGN IMMIGRANTS IN CALIFORNIA IN 1916, 1917 AND 1918. — *The Annual Report of the Commission of Immigration and Housing of California.* Sacramento, January 1918.

In an article in our issue for December 1917 (1) we dealt at some length with the work done until 1916 by the Commission of Immigration and Housing for the large body of immigrants who annually swell the population of California.

This work falls under the main heads of finding work or land for the immigrants, of protecting them from the exploitation to which their frequent ignorance of the customs and language of the United States exposes them, of educating them with especial view to converting them into good American citizens, and of endeavouring to secure that they live in decent and healthy conditions.

The larger number of the immigrants into California go to increase the supply of agricultural labour. The difficulty of the task of assimilating

(1) Page 66.

them may be estimated from the results of a census which was taken in 1918 of the pupils of the schools of San Bernardino county.

Total number of American born pupils in the schools of San Bernardino county	5,070
» » » foreign » » » » » » » » »	2,271
Percentage » » » » » » » » »	30.9
Total number of Mexican » » » » » » »	1,441
» » » foreign » who have been naturalized	612
» « » pupils in whose homes a foreign language is spoken	1,848
Percentage » » » » » » » » »	25

Of foreign-born children other than Mexicans at least twenty belonged to each of the following nationalities: British (339), German (120), Italian (76), French (44), Swedish (38), Danish (27), Hungarian (27), Swiss (22), Norwegian (21), Austrian (20), Portuguese (20). It was estimated that the town of Los Angeles spent $1,271,575 a year on immigrants, of which expenditure 47.8 per cent. was occasioned by their crime, 25.2 per cent. by their sickness, 16.4 per cent. by their poverty and 7.5 per cent. by their unemployment, while only 2.9 per cent. of the sum was spent on their education.

Land and Work for Immigrants. — The problem of finding land for men who wish to settle in California is, owing to the peculiar agrarian conditions which have been produced in the State, a very special one with which we deal elsewhere (1). Information as to lands was however supplied to immigrants by the Commission's Bureau of Complaints and Information in a certain number of cases in 1916, 1917 and 1918.

As regards the placing of men in employment, the legislature has, on the initiative of the Commission, established State employment offices, which are however hampered in their work by lack of funds. The Federal government has also set up a departmental system of free labour exchanges, but these are as yet inadequate to the needs of the situation. The problem of the distribution of the agricultural labour supply in California is particularly difficult because the crops of the State are specialized and are not diversified. The districts where the few large specialized crops are grown are widely scattered, and during the harvest season the workers have to travel great distances in order to " follow the crops ". There is therefore a numerous class of casual labourers who have no fixed home and are largely unemployed during five or six of the autumn, winter or spring months.

By supplying information as to employment agencies and the demand for labour, and by many indirect methods connected with all the various branches of its activity, the Commission helps to place men in work. At the same time it does all in its power to bring about the improvement of the system of labour exchanges, and such modifications of the agricultural and agrarian systems as would increase and facilitate employment.

Protecting the Immigrants. — The Commission protects the immigrants

(1) See our issues for April 1917 page 118, September 1917, page 59, and this issue, pages 574-8.

chiefly by means of its Bureau of Complaints and Information which, with the aid of a polyglot staff, determines the causes of problems, investigates individual complaints, and prepares bills for the protection of foreigners. The Commission also employs agents speaking foreign languages who go among the immigrants and explain laws to them, discover their grievances, act as mediators between them and their employers and enlighten them as to their duties and rights.

From January 1914 until the end of 1918 the Bureau of Complaints dealt with a total number of 13,365 complaints from immigrants and with 8,145 applications for information. The grounds which caused more than 500 complaints each were as follows:

Non-payments of wages and delay in paying wages	1,973	complaints
Insanitary labour camps	927	»
Breaches of contract	812	»

Education of Immigrants. — The Commission contributed to the work of educating immigrants by inducing the education authorities or employers to provide instruction for children in remote labour camps, by arranging for adult foreigners to attend night-schools, by instituting special classes for foreign-born women, and by the system of "home teachers" for which it is responsible.

The work in night-schools and among women has been undertaken especially in Los Angeles, a town chosen for purposes of experiment. The night-school teachers aim at keeping in touch with their immigrant pupils outside the classroom and are able to help them in many ways. The "home-teachers", whose objects and methods we explained in our previous article, have successfully continued and developed their activity. All this educative work aims above all at teaching the immigrants the English language, the principles of the American system of government and the rights and duties of American citizens, and certain rules of health and domestic economy.

In 1918 classes in English for soldiers of foreign origin were held in certain military camps.

In its work of education the Commission has recently had the co-operation of several organizations in California, namely the San Francisco Chamber of Commerce, the Croatian Society and South Slavonic Alliance of Oakland, the Japanese Agricultural Association of California, the General Federation of Women's Clubs, the State Federation of Women's Clubs, and the Women's Committee of the State Council of Defence.

Improvement of Conditions in Labour Camps. — In our previous article we gave some data as to the Californian labour camps for agricultural labourers, lumbermen and industrial workers in which dwell large numbers of men, women and children, of whom many are immigrants and of whom rather more than half are employed on agriculture and lumber work. We also explained that since 1915 the power of enforcing the labour Camp Sanitation Act has belonged to the Commission of Immigration.

In the last five years living conditions in Californian labour camps have been revolutionized. Five years ago one bath was found in the whole number of lumber camps visited, but today the workers have facilities for bathing in practically every lumber camp in the State. The camps for farm labourers are difficult to handle, because farms are often rented, in which case no one considers himself responsible for conditions in the camp; but progress has been made in the work of improving these conditions. For workers on the holdings of fruitgrowers, which are often small, the Commission has evolved the plan of so-called "community camps", which are jointly established and managed by a number of small holders. This plan has been successfully tried and the intention is to put it into practice on a large scale.

It is fairly certain that the improvement of conditions in the camps is largely responsible for the prevention of labour trouble among some 75,000 or 80,000 unskilled migratory workers in the State. When at various times there have been in various places threats of outbreaks of violence, the Commission has sent its inspectors to the threatened spot, and these by persuasion, backed by the power to take legal proceedings, have induced those responsible to supply proper living conditions. The temper of the workers has thereupon changed and peaceful negotiation has become possible.

4. LANDS AVAILABLE FOR SETTLEMENT IN THE WESTERN STATES — *Official U S. Bulletin*, Vol. 3, No. 541 Washington, 18 February 1919

Non-irrigable Lands. — Surveying done last summer has discovered that more than a million acres of land in the Western States are available for entry under the law known as the Enlarged Homestead Act, of which the principal provision is that the lands declared to be thus available should not be irrigable. The orders containing such declaration were approved in January. The area is distributed as follows among States:

Idaho	10,840	acres
Montana	17,876	»
Oregon	39,720	»
South Dakota	211,331	»
Wyoming	726,131	»
Total	1,095,898	»

Tracts of 640 acres each. — In January also, more than 940,000 acres, divided into tracts of 640 acres each, were rendered available for entry

under the Stock-Raising Homestead Act. These lands were distributed among States as follows:

Arizona	47,020	acres
California	97,332	»
Colorado	91,097	»
Kansas	17,100	»
New Mexico	392,320	»
Oklahoma	4,998	»
Oregon	57,500	»
Wyoming	234,050	»
Total	941,417	»

The total area hitherto declared available for entry under the Stock-Raising Homestead Act, since provision for administering it was made in July 1917, is a little more than 13,500,000 acres. The work involved has included the organization of the classification of the lands and the determination of the principles of classification; the examination of the lands, the determination of their character; and the issue of orders determining their designation.

RUGGERI ALFREDO, gerente responsable.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

Origin of the Institute and Summary of the International Treaty.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall.

(*a*) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(*b*) communicate the above information as soon as possible to those interested ;

(*c*) indicate the wages paid for farm work ;

(*d*) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases and, if possible, any effective remedies ;

(*e*) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(*f*) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastral arpent (Hungary)	=	1 12201	acres
1 Centimetre	=	0 393715	inches
1 Cho (60 ken) (Japan)	=	119 30327	yards
1 Crown (1, heller) (Austria Hungary)	=	10 *d*	at par
1 Crown (100 oere) (Denmark, Norway, Sweden)	=	1s 1 5/9 *d*	at par
1 Desiatine (2 tchetwerti) (Russia)	=	2 69066	acres
1 Dinar, gold (100 para) (Serbia)	=	9 33 61 *d*	at par
1 Dollar gold ($) (100 cents) (United States)	=	4s 1 16/61*d*	at par
1 Drachm, gold (100 lepta) (Greece)	=	9 33 64*d*	at par
1 Egyptian Kantar	=	99 0498	lbs
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1 03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1s 7 53/64*d*	at par
1 Franc (100 centimes) (France)	=	9 33/61*d*	at par
1 Gramme	=	0 03527	oz
1 Hectare	=	2 47101	acres
1 Kilogramme	=	2 2	lbs
1 Kilometre	=	1093 61	yards
1 Kokou (10 To) (Japan)	=	1 587.6	quarts
1 Leu, gold (100 bani) (Rumania)	=	9 83/64*d*	at par
1 Leu (100 stotinki) (Bulgaria)	=	9 33 61*d*	at par
1 Lira (100 centesimi) (Italy)		9 33 64*d*	at par
1 Litre	=	0 21998 0 0275	gallons bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4*d*	at par
1 Mark (100 penni) (Finland)		9 33/61*d*	at par
1 Metre	=	3 28081	feet
1 Milreis, gold (Brazil)		2s 2 61/64*d*	at par
1 Milreis, gold (Portugal)	=	4s 5 10/64*d*	at par
1 Pesetas, gold (100 centimos) (Spain)	=	9 33/61*d*	at par
1 Peso gold (100 centavos) (Argentina)	=	3s 11 37/64*d*	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	18s 0 19/61*d*	at par
1 Pund (Sweden)	=	0 93712	lbs
1 Quintal	=	1 96843	cwts
1 Rouble, gold (100 kopeks) (Russia)	=	2s 1 3/61*d*	at par
1 Rupee, silver (16 annas) (British India)	=	1s 6*d*	at par
1 Talari (20 piastre) (Egypt)	=	4s 1 1/3 *d*	at par
1 Verst (Russia)	=	1166 64470	yards
1 Yen, gold (2 tun or 100 sen) (Japan)	=	2s 037/64*d*	at par
1 Zentner (Germany)	=	110 23171	lbs

YEAR X — NUMBER 11-12 ROME, NOVEMBER-DECEMBER 1919

INTERNATIONAL INSTITUTE OF AGRICULTURE

BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

CANADA.

PROGRESS RECENTLY MADE IN THE CO-OPERATIVE SALE OF AGRICULTURAL PRODUCE AND PURCHASE OF FARMERS' REQUISITES.

SOURCES:

REPORTS OF AGRICULTURAL REPRESENTATIVES AND OTHER OFFICIALS in *The Agricultural Gazette of Canada*, Ottawa, May 1919.

CO-OPERATIVE WOOL-MARKETING IN QUEBEC in *Farmers' Advocate*, Vol. LIV, No 1388, London (Ontario), 1 May 1919.

The rapid progress of agricultural co-operation in Canada, to which we have several times drawn the attention of our readers (1), has latterly been accentuated. It is interesting to bring together some recent data on this subject supplied by certain Provincial Departments of Agriculture.

§ 1. CO-OPERATIVE BUYING AND SELLING IN PRINCE EDWARD ISLAND.

The biggest organization which buys and sells co-operatively in this province is the Prince Edward Island Co-operative Egg and Poultry Association, Limited, which has its head office and warehouse in Charlottetown. It began business in 1914, has today 3,300 members, and is financed by means of capital notes of $20 per member. Its chief activity is the candling, grading and marketing of eggs, but it also handles some poultry during the autumn and early winter and it has purchased fodder for its members. In 1918 about 900,000 dozen eggs, valued at $350,000, were sold through the associa-

(1) See in particular the articles in our issues for March and October 1917, pages 17 and 1.

tion, that is one half the total quantity of eggs produced in the province. The association pays a flat price to members for eggs and poultry at the time of their delivery at the candling station. At the end of the year profits are distributed among members in proportion to the business each of them has done.

In 1918 another co-operative association of the same kind, the Canadian Farm Products, incorporated, was organized at Charlottetown. It has no share-capital, but it has power to accumulate and create a capital fund equal to the cost price of its total real estate, property and equipment. This capital fund is apportioned among the branches in proportion to the amount of business each did during the year in which it was raised. A certificate issued to each shareholder is a guarantee to him that his share of the capital fund will be returned to him in cash on a date specified in the certificate. This repayment is not made until the fund for the following year has been collected and the business of the current year concluded.

In 1915 the first attempt to market wool co-operatively was made through the Agricultural Representatives. In 1915, 5000 pounds were graded and sold co-operatively; in 1916, 28,000 pounds; in 1917, 24,000 pounds; in 1918, 53,000 pounds. The quantity sold in 1918 is valued at $39,750 and is about one seventh of the total clip of the province. In 1915, 1916 and 1917 the wool was graded and then sold by tender, and a cheque for the value of his wool, less his proportion of the expenses, was subsequently sent to each producer. In 1918 the wool was marketed through the Canadian Co-operative Wool Growers, who paid 40 cents per pound on account when the wool was delivered at the warehouse and the balance, less expenses, after the wool had been sold.

There are 59 Farmers' Institutes in the province, and nearly all of them have done a limited amount of co-operative buying for their members, dealing in fodder, fertilizers, seed, spraying material, etc. No figures are available to show the amount of business done but it must be large in the aggregate. The goods are usually ordered through the secretary, and each member pays in cash, on delivery, the price of his purchases and freight and other charges. Many institutes have adopted the practice of selling their lambs co-operatively in the autumn. Tenders are asked for. The successful bidder receives the lambs, and pays the member delivering them, at the place of consignment. One institute did a business of $14,000 in 1918.

No co-ordination of the activities of the various co-operative organizations has been attempted, but it will probably result eventually from the movement of the Canadian Farm Products to establish local branches.

§ 2. Co-operative buying and selling in New Brunswick.

The Agricultural Societies United is an incorporated organization of the agricultural societies of New Brunswick province, and was formed for the purpose of buying wholesale chemical fertilizers which it sells to these societies at cost price plus expenses. Each member society pays an annual fee of $5 and is required to send in its orders within a stated time.

The United Farmers of New Brunswick organized a head office at Woodstock with a branch at Sackville late in 1917. Other branches were formed in the different parts of the province during the winter of 1917-18. The company is incorporated and issues shares valued at $25 each. It buys staple supplies for farmers, and consigns live stock and other farm produce.

§ 3. Co-operative buying and selling in Quebec.

In 1915 the co-operative agricultural associations of Quebec province began to unite in district federations, and in 1916 they abandoned this form of grouping for a single central association, the Federation of Quebec Agricultural Co-operative Associations, which now includes 91 affiliated associations in 36 different counties. They buy chiefly cattle foods, seed, coal, binder twine, insecticides, and agricultural machinery, and their sales are mainly of live stock (cattle, pigs, fowls), either alive or slaughtered, eggs and wool.

All these affiliated co-operative associations are incorporated and are active under the Act of 1908, have the same regulations and are under the supervision of the provincial government. 150 unaffiliated associations, all forming various groups, are operating separately.

The federated associations do all their business on the basis of cash payments and buy and sell only on commission. They never keep goods in stock. As a rule the amount of their paid-up subscribed capital is not large, but all of them have made arrangements with the banks so that they can procure the money they need.

The secretaries are paid no salaries, but on each buying or selling transaction, after all expenses of handling have been paid, they receive as commission a proportion averaging about 2 per cent. of the money which changes hands. The secretaries are also voted a sum of money, proportionate to the profits of the association and their own activity, by the general assembly when the accounts are settled at the end of the year.

Each local or provincial association has an average membership of one hundred. Their total turnover in 1918 was $450,000.

The co-operative wool marketing associations of Quebec Province had in 1918 a total membership of 1,950 and marketed the same quantity of wool as in 1917 (1).

§ 1. Co-operative buying and selling in Ontario.

A few years ago the Ontario Department of Agriculture organized a Co-operation and Markets Branch for promoting and guiding the co-operative enterprises of farmers. Four classes of associations exist in the province:

(1) See our issue for June 1918, page 462.

(1) The Farmers' Clubs and farmers' associations for buying goods wholesale and making combined consignments of agricultural produce.

(2) The associations primarily engaged in consigning live stock and its derivative products.

(3) Associations of breeders for the disposal of purely breed fat cattle and dairy cattle.

(4) Associations for the marketing of fruit, vegetables and special crops and the purchase of supplies.

The Farmers' Clubs, of which there are from 400 to 600 in the province, are associations of farmers, usually unincorporated, for the purchase of supplies and, to a less general extent, for the sale of agricultural produce. Sometimes however the activities of the clubs are only educational and social. The supplies bought are mainly the less perishable of farmers' requisites, such as milled foods for live stock, oil cake, binder twine, flour, salt, coal, clover, seed and the like ; and the sales are usually of cattle and hogs, and occasionally of wool, potatoes and hay.

Clubs of this kind are often affiliated to the United Farmers of Ontario, an incorporated company which has local branches in many districts, and which constitutes a medium through which its affiliated clubs conduct their business.

The clubs of a county have in some cases been combined under one management. In Victoria County six clubs which have thus combined have a total membership of 425. They consign cattle and hogs to markets, their business in hogs amounting to nearly $240,000 in 1918. Of twenty clubs in Grey County the only one which is incorporated has a membership of 327 and sold live stock to the value of $263,000 in 1918. Of the unincorporated clubs in this county one consigned hay and live stock to the value of $380,000 in 1918, while the business of the others varied from $60,000 to $125,000.

Altogether 200 clubs and associations in the province are engaged on the consignment of live stock.

The purchase of supplies by the clubs and co-operative associations is usually financed by the local banks on the security of members' promissory notes but other methods are also adopted. Thus in Halton County each member pays $5 for a life membership and the fund thus formed finances business. In some clubs purchases are financed by directors' notes. The simplest plan adopted is that of causing members to pay cash when they make their orders.

When goods are consigned to a commission house for sale, no reserve capital is actually necessary if members are willing to wait until the proceeds of sales are remitted. With most of the clubs this is the case. But when members demand to be paid in cash at the point of consignment some arrangement for financing transactions has to be made with a bank. When an association has no paid-up capital individual notes are given, as in the case of purchasing, and the manager pays for the live stock on commission, reserving enough to cover expenses. The Thunder Bay Co-operative Market-

ing Association, for example, pays 50 per cent. on delivery and the balance when the proceeds of sales are received.

Managers' commissions are usually 1 or 1 ½ per cent. on the selling price of the stock sold, or at the rate of so many cents a head.

Among the other kinds of co-operative societies we will mention those formed by growers of fruit and special crops. They comprise associations of growers of fruit and vegetables, apples and pure seed. In the Niagara district there are seven active co-operative associations of fruit growers besides three or four which are more or less inactive. Their aggregate receipts from sales are estimated at $500,000 a year, Vineland contributing more than half of this sum. In the counties of Essex, Kent and Lambton there are a number of vegetable growers' associations, and in the leading apple districts associations of apple growers are quite numerous. Associations of this kind employ a manager to market their output and to buy containers, spraying materials, seeds and fertilizers. They follow in their business methods like those we have described, members being paid in some instances when returns come in, in others at the end of the season. Returns are pooled in the case of some of the apple growers' associations.

Seed circles for the production and sale of registered seed and egg circles for the co-operative marketing of eggs are other forms of association. Kenora district, for example, has a Clover Seed Growers' Association which does business for about $15,000. Members are paid $10 a bushel on account after the seed has been graded and cleaned, and the balance due to them at the end of the season.

§ 5. Co-operative buying and selling in British Columbia.

Co-operative buying is carried on to some extent in British Columbia by the Farmers' Institutes. The Robson Farmers' Institute in September 1913 bought food for live stock and flour in mixed carloads and has done so ever since. The Institute keeps the accounts of this buying quite separately from those concerned with its ordinary funds. It orders a carload or so of goods about once in eight weeks. The system followed is to obtain quotations of prices from the millers and to send these to each member, with a form on which the latter can state the amount he requires. Goods are ordered to meet the requirements thus ascertained, and on their arrival members are notified that they must come and fetch the goods procured for them. If more has been procured than members have ordered it is stored in a warehouse. Three per cent. is added to the invoice price, namely two per cent. which remunerates the secretary and one per cent. which covers incidental losses. To finance the transaction most of the cash is collected before the car arrives, but if purhasers are unable to pay immediately, sufficient funds to meet obligations are procured from a chartered bank.

§ 6. Co-operative Selling and Buying in Saskatchewan.

In 1918 the Co-operative Branch of the Saskatchewan Department of Agriculture marketed 916 consigaments of wool, aggregating 394,000 pounds. Fifteen thousand sheep owners in the provice have been notified that this system of marketing will be followed with the present season's clip, the wool being sold through the Canadian Co-operative Wool Growers, Ltd., at Toronto. An advance payment will be forwarded as soon as the wool is received and the final payment made when it is sold.

An attempt has recently been made by the provincial Department of Agriculture to find a home market for the surplus of horses produced. Agricultural societies in the longest settled part of the province, where the surplus principally exists, were circularized as to the advisability of holding co-operative horse sales, and eight of these were arranged. Their object was two-fold: they were to provide a meeting-ground for sellers and purchasers of horses among farmers of a neighbourhood, and they were to enable horse dealers conveniently to inspect and buy horses in large numbers for consignment to districts where there was still a shortage of them. Many farmers seem to prefer buying imported animals from dealers to buying from their neighbours animals which they know to have been raised in the district and to be suitable to their requirements; and it was felt that these sales would largely overcome this prejudice, as well as afford opportunities for dealers to acquire the horses they needed within the provinces.

Each society which undertook to hold a horse sale made its own regulations and local arrangements. Except in two cases of sales by private treaty a local auctioneer was employed.

From 30 to 60 horses were entered at each sale, but unfortunately a considerable percentage were advanced in years or otherwise unsuited for the best trade Evidently some owners looked upon these sales as an excellent opportunity for disposing of animals for which they had no further use. When good horses were put in they were generally held at high reserve prices.

The sales were held rather late in the season, so that dealers were hardly able to buy horses at them for resale before the beginning of the sowing season. However the officials of the agricultural associations concerned expressed themselves in most cases as anxious to hold sales next year, and officials of the Department of Agriculture are convinced that sales of this kind will play an important part in developing the horse breeding industry in Saskatchewan. Plans to hold a much longer series of sales early in 1920 are on foot.

SWITZERLAND.

THE SWISS PEASANTS' UNION AND THE SWISS PEASANTS' SECRETARIAT IN 1918.

SOURCE:

VINGT-ET-UNIÈME RAPPORT ANNUAL DU COMITÉ DIRECTEUR DE L'UNION SUISSE DES PAYSANS ET DU SECRÉTARIAT DES PAYSANS SUISSES (*Twenty-first Annual Report of the Managing Committee of the Swiss Peasants' Union and the Swiss Peasants' Secretariat*), 1918. Publications of the *Secrétariat des Paysans suisses*, No. 58, Brougg, 1919.

§ 1. THE SWISS PEASANTS' UNION.

In the beginning of 1918 the Swiss Peasants' Union had 32 sections and a total membership of 244,292. The increase since 1917 was one of 4 sections and 29,557 members.

The membership of the individual sections was as follows in 1917 and 1918:

	1917	1918
1. Swiss Society of Agriculture	62.390	65.809
2. Federation of the Societies of Agriculture of Romanic Switzerland	25.678	28.229
3. Ticinese Society of Agriculture	4,043	5,545
4. Swiss Society of Alpestrian Economy	1,000	1,000
5. Federation of Agricultural Co-operative Societies of East Switzerland	15,578	18,100
6. Federation of Agricultural Co-operative Societies of the Canton of Berne and Neighbouring Cantons	20,000	25,000
7. Federation of Agricultural Co-operative Societies of Central Switzerland	4,200	5,000
8. Federation of Agricultural Co-operative Societies of North-West Switzerland	6,000	6,000
9. Federation of the Zürich Agricultural Societies and Unions	5,700	6,500
10. Worb Agricultural Co-operative Society	140	160
11. Swiss Federation of Unions of Breeders of Brown Cattle	6,687	6,928
12. Federation of Unions of Breeders of Brown Cattle of East Switzerland	2,496	2,653
13. Swiss Federation of Unions of Breeders of Dappled Red Cattle	12,892	12,491
14. Federation of Unions of Breeders of Red Cattle of East Switzerland	1,200	1,200

	1917	1918
15. Swiss Federation of Unions of Breeders of Black Dappled Cattle	500	506
16. Federation of Cheesemaking Societies of North East Switzerland	13,900	15,000
17. Federation of Cheesemaking Societies of North-West Switzerland	7,352	7,687
18. Federation of Societies for the Utilization of the Milk of Central Switzerland	3,500	6,800
19. St. Gall Federation of Cheesemaking Societies	1,000	3,000
20. Argovian Federation of Cheesemaking Societies	6,740	4,560
21. Thurgovian Federation of Cheesemaking Societies	2,000	6,030
22. Dairy Federation of Vaud and Freibourg	7,269	7,436
23. Peasants' and Workmen's League of Basle Country	1,000	1,000
24. Argovian Peasants' Federation	1,000	1,200
25. Swiss Federation of Under-Foresters	700	700
26. Vaud Market-Gardeners' Association	90	102
27. Swiss Union of Agricultural Mills	1,000	1,000
28. Swiss Association of Distillery Concessionaries	680	820
This was joined in 1918 by the		
29. Swiss Association of Fishpond Cultivators	- -	56
30. Association of Swiss Market-Gardeners	—	700
31. Federation of Market-Gardening Societies of Romanic Switzerland	—	3,067
32. Association of Swiss Fishery Cultivators	—	13
Total	214,735	244,292

The work of the Union and of its organs in 1918 can be grouped under two headings, namely work included in the programme drawn up by the directing committee and work which formed no part of that programme.

Of the work which entered into the Union's programme, the preponderant part was formed by provisions of an economic order made in concert with the federal and cantonal authorities and aimed at improving the grave economic position in which the prolongation of the war placed the country.

The Union was therefore represented in the Provisioning Office which the federal government formed in 1918, and it effectively contributed to the solution of important questions of an economic character, such as the questions of feeding and provisioning the country and increasing home production, the problem of agricultural labour, of fixing maximum prices for the principal foodstuffs, meat and other products largely consumed,

of rationing foodstuffs, of securing international agreements for supplying wood to Italy and France, of reducing effective mobilization, the question of the Swiss Agricultural Association among Industrial workers (1) founded in 1918, and that of measures for restraining the increase of the price of land, etc. It may be said that there was no problem of any importance to the solution or study of which the Union did not contribute.

As regards the last of the problems cited above, the restraining, namely, of the increase of the price of land, it should be noticed that the phenomenon found elsewhere of an extraordinary rise in the price of land appeared in Switzerland. The causes of this rise are to be sought in the general improvement in the position of agriculture, in the large demand for land from persons outside the agricultural class who wished to be sure of a supply of food, and lastly in the purchases made for the purpose of investing war profits in land. The Union intervened in this grave matter in various ways and obtained, on the proposal of the Federal Chamber, that the Federal Department of Public Economy appointed a commission charged to discover what steps should be taken, a commission with which the Union was able to co-operate. The resolutions of the commission resulted in a decree of the Federal Council regarding the alienation of forest and rural properties, and in the cantons in which this decree was applied it was found that the trade in real estate thenceforward took a more normal course.

The Union had afterwards to give its attention to the law regarding protection against foot and mouth disease, to the law as to insurance against accidents and illness, to the customs tariff, to the tax on war profits and to the direct federal tax which was rejected.

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The Union's dependent offices work by themselves and successfully. They are the Office of Information as to Prices, the Valuation Office, the Office of Information as to Insurance against Accidents and Illness and the Farm Buildings Office. For the organization of these offices and for their programme of continuous work, we refer the reader to an article in our issue for June 1917 which deals with the matter adequately.

The importance which the Office of Information as to Prices has acquired is partly due to the constantly increasing circulation of its organ, *The Markets Review*. In 1918 an average number of 110,170 copies of this paper were printed, 95,910 of the German and 14,260 of the French edition. *The Markets Review* was issued in 1918 as a supplement to eleven German and two French agricultural newspapers.

In 1918 the Union also had to do a notable work in ascertaining the

(1) In this connection see § 8 of the article, "The Problem of Land Settlement in Switzerland", in our issue for last May.

quantity of fruit available for sale. The enquiry brought to light the following figures, which we place side by side with the corresponding figures for 1917:

	Autumn 1918 — quintals	Autumn 1917 — quintals
Early pears for perry	14,200	183,600
Late pears for perry	28,500	253,700
Pears for drying	4,800	—
Sweet apples for drying	19,350	—
Cider apples	195,600	245,600
Early table apples	45,600	55,400
Late table apples	221,100	233,300
Plums	27,850	21,200
Nuts	2,000	4,800
Total	559,000	997,600

This office played an important part in making provision with regard to the quantity of potatoes to be exported per unit of cultivated area. This was a problem of high international interest and the opinions on it expressed within the Federal Commission for Providing the Country with Potatoes disagreed. The Office of Information then intervened, and made an enquiry which established the yield per hectare in the various districts of Switzerland. It was ascertained that it was possible to count upon a yield varying from 110 to 155 kilogrammes an are, and that the average Swiss yield could certainly not be placed above 135 kilogrammes. The commission then, on this basis, fixed the quantity which could be exported as 90 kilogrammes an are.

The Valuation Office made 90 valuations in 1918. The value represented by the real estate valued in 1918 was as follows:

Valuation of real estate in accordance with value of yield	6,607,000 frs.
» » » » » market value	1,378,000 »
» » » » » value to the families supported thereby	57,000 »

The valuations of yield which this office made from 1914, the year of its foundation, to 1918 represent a total value of 18,500,000 francs. The area of the real estate valued was 1109 hectares in 1918 and 4128 hectares from 1914 to 1918.

The Farm Buildings Office, founded in the beginning of 1917, was able in 1918 to do notable work. It now consists of an office of information and advice, the "Office-conseil", and a technical office, the "Bureau-technique". The total number of affairs treated in 1918 was 353. Most of this business naturally regarded preventive measures and schemes representing aims rather than what was immediately practical.

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The Union's organs are the *Schweizerische Bauernzeitung* and the *Paysan suisse*. These were added as supplements in 1918 to 14 German, 4 French and one Italian newspaper, all published in Switzerland. An average of 110,000 copies were printed of the German and 26,700 of the French paper, whereas from 1901 to 1910 the average number of copies of the *Bauernzeitung* printed was 60,645, that of the *Paysan suisse* 26,700.

§ 2. Swiss peasants' secretariat.

The programme of work which the Union drew up for the Swiss Peasants' Secretariat for 1918 comprised the following points: (1) preparatory work connected with the revision of customs tariffs and commercial treaties; (2) research as to agricultural yield by means of double and single-entry book-keeping; (3) collection of model and printed rules hitherto used by agricultural associations; (4) publication of a proposed contract of lease; (5) reorganization of archives and of the library.

The Peasants' Secretariat brought to an end in 1918 an investigation of the influence of foreign customs tariffs on Swiss exporting of agricultural produce. This investigation provided a basis for the proposals which the Swiss Peasants' Union placed before the Federal Department of Public Economy with a view to the renewal of commercial treaties.

The research on the subject of agricultural yield was carried out by means of book-keeping by single and double entry. In 1918 four classes in single-entry book-keeping were attended by 158 enrolled pupils. Of 146 who attended the courses of 1917, 80 per cent. or 117 returned 373 sets of accounts to the Secretariat in order that it might check or utilize them. Of these 373, 118 were returned for the first time and by persons who attended the 1917 classes, 49 for the second time and by persons who attended the 1916 classes, 9 for the third time (1915 classes), 19 for the fourth time (1914), 25 for the fifth time (1913), 26 for the sixth time (1912), 15 for the seventh time (1911), 16 for the eighth time (1910), 18 for the ninth time (1909), 20 for the tenth time (1908), 14 for the eleventh time (1907), 7 for the twelfth time (1906), 16 for the thirteenth time (1905), 13 for the fourteenth time (1904), 4 for the fifteenth time (1903), and 4 for the sixteenth time and by persons who attended the 1901 course.

In 1917 the number of accounts returned to the Secretariat had increased by 55. For the purpose of the statistics in question it was possible to make use of 353 accounts, that is of 53 more than in the previous year.

During 1918 the Secretariat also assumed the task of auditing and utilizing the statistics of the beekeeping accounts which 84 beekeepers kept in this year on the invitation of the Swiss Society of the Friends of Beekeeping. The results were used for the compilation of statistics which were published, with comments, in a report issued by the *Bienenzeitung*.

The different institutions of the Peasants' Union, and in particular the Valuation Office, constantly make use of the results of the researches as to agricultural yield, researches which have with the passage of time become the basis for various works and which are indispensable as sources of information. In the field of double-entry book-keeping the Secretariat also brought important works to a conclusion in 1918.

In December a proposal of a member of the National Council, Schaer, as to the rural exodus, was discussed in this council. The proposal which invited the Federal Council to study measures for stemming the depopulation of the country side and the mountains, was referred to the Secretariat with directions to report on it. The Secretariat gave serious attention to this important problem, indicating its evil side and advising as to remedies. The enquiry could not be completed nor its results published in 1918.

The Secretariat also accomplished much other work and responded to a notable number of requests for information.

UNION OF SOUTH AFRICA.

THE PROGRESS OF AGRICULTURAL CO-OPERATION.

SOURCES (OFFICIAL):

LAND AND AGRICULTURAL BANK OF SOUTH AFRICA: REPORT FOR THE YEAR ENDED 31ST DECEMBER 1918 Cape Town, 1919.

DEPARTMENT OF AGRICULTURE: REPORT WITH APPENDICES FOR THE YEAR ENDED 31ST MARCH 1918. Cape Town, 1918.

Agricultural co-operative societies in South Africa are so largely capitalised by the Land and Agricultural Bank of South Africa that the annual reports of that bank furnish a considerable amount of information regarding their working. The following notes are, in the main, taken from the 1918 Report of the Bank, but we are also indebted to some extent to the Report for 1917-18 of the Department of Agriculture. Unfortunately the two reports do not relate to the same period.

§ 1. SOCIETIES WITH LIMITED LIABILITY.

The societies registered under the Co-operative Acts, and officially recognised as co-operative, are based upon the unlimited liability of the members. Only to these societies can the Land Bank make advances. There exists, however, a number of societies which have not adopted the principle of unlimited liability but are essentially co-operative in character. They are mainly confined to the Cape and Natal and deal with the making

of cheese and butter, bacon curing, fruit drying, the curing and selling of Turkish tobacco, the sale of agricultural produce and the purchase of supplies, the slaughter and export of meat, the holding of stock sales, the testing of milch cows, the collecting and selling of eggs and poultry, insurance against hail and many other matters. No statistics appear to be available in regard to these societies nor is there any general report on their activity. The Report of the Department of Agriculture states, however, that they vary greatly in size and in the extent of their operations, some of them having large memberships and turn-overs, whilst others, like the egg circles and cow-testing societies, are small; that they have had difficulties to contend with and have not been uniformly successful, but that the majority have done well and that their success shows that there is scope for them as well as for societies with unlimited liability.

§ 2. Societies with unlimited liability

The majority of the societies with unlimited liability are *societies for the sale of produce and the purchase of agricultural requisites*. Most of the societies deal mainly in one kind of produce, notably maize. A society selling maize erects stores at suitable centres throughout the district in which it carries on business. Members bring their maize to the store, where it is graded, and thereafter the member is paid an advance according to the grade of his maize. All the maize is pooled and when the nett realised value is ascertained the difference between that amount and the advance which was made on delivery is paid to the member. At the instance of the Land Bank, a uniform advance has been adopted which usually leaves a margin of about 2*s*. a bag.

The Report of the Department of Agriculture notes that the storage of maize, often for a considerable time, by individual societies for the purpose of filling contracts with the mines, or in expectation of a rise in price, has proved very expensive on account of the amount of capital locked up, the cost of maintaining the stores and staff, the loss by weevils and so forth. If elevators are erected by the railways, as seems likely, and the maize, with the exception of that retained for filling contracts, is sold as soon as it is available, considerable savings can be effected. To hold maize in the hopes of a rise in price is speculation and is not a desirable practice for societies.

A class of society in which there is growing interest is the *co-operative dairy cattle society*. The main object of such a society is to supply the members with dairy live stock, a limit of £300 being placed on the value of stock supplied to any one member. Membership is usually limited to about ten, primarily to confine the society's activities to a comparatively small area and thus ensure effective supervision. In closer settlements the membership is usually larger. Ownership in the live stock remains in the society until the purchase price has been fully paid. In ordinary cases the member pays interest only for the first six months, and thereafter the

capital is repayable in equal monthly instalments for five years. Where farmers are in less fortunate circumstances capital repayments are calculated on a sliding scale. Thus for the first year only ten per cent. of the capital is payable and the proportion increases by five per cent. each year, so that in the fifth year the proportion of capital repayable is 30 per cent.

The administration costs in societies of this class are low. In some cases the little secretarial and book-keeping work is undertaken by one of the members in an honorary capacity. In any case if the society charges members ½ per cent. more than the cost (5 per cent.) of borrowed capital, ample funds are provided to cover working expenses.

The Ennersdale (Natal) Dairy Society was the first society of this kind to be established. The ten members were supplied in December 1916 with 281 cows and yearlings costing £3,000. At 31 December 1918 the debt was reduced to £1,625 and the number of the cows together with the calves had increased to 527. The amount realized for the milk produced by the cows has been sufficient not only to pay the monthly instalment, but also to put a substantial amount in the members' pockets. For instance, one member's obligation to the society was roughly £6 per month, but the cows were earning £17 per month.

It seems likely that dairy cattle co-operative societies will in a little time be an important factor in improving the average yield of milk per cow throughout the Union, which at present is only about 100 gallons a year. The establishment of a society may arise merely out of a desire to obtain cows, but this quickly gives place to a desire to own better cows and a really good bull. This form of co-operation also has the merit of assisting the small farmer to a greater degree than any other, and the experience gained among the settlers at Kopjes, Orange Free State, confirms that opinion. At Kopjes the membership of the society was at first deliberately limited to 20. It is now proposed to increase the membership to 30, as other settlers are clamouring to be admitted.

Although there had recently been a great expansion in cheese-making, there were on 31 December 1918 only three *co-operative cheese-making societies* with unlimited liability. They were all in the Orange Free State.

In the Cape Province, a small number of dairy farmers living near the town of East London, who had previously supplied milk to a private vendor, formed a *co-operative society for the sale of milk* in 1918 and acquired the business. The dairy farmers concerned expect to realize threepence per gallon more for their milk.

§ 3. Advances to co-operative societies by the Land Bank.

The Land and Agricultural Bank makes advances to co-operative Societies in two forms — cash credit accounts and instalment loans. Advances on cash credit accounts are to provide working capital while the loans repayable by instalments are made to cover the cost of property, buildings and similar unproductive capital expenditure.

The following table shows the advances granted to co-operative societies and the amounts outstanding (inclusive of interest) on 31 December 1918:

TABLE I. — *Advances granted to Co-operative Societies.*

	Number of Societies	Advances from Land Bank	
		Granted	Outstanding on 31 Dec. 1919 (including interest)
		£	£
Transvaal Societies:			
Societies for sale of produce and supply of farming requisites	15	476,100	342,802
Threshing machine society	1	500	83
Total: Transvaal Societies	10	476,600	342,885
Orange Free State Societies:			
Societies for sale of produce and supply of farming requisites	4	174,000	94,204
Cheese-making societies	3	14,200	7,910
Dairy live stock societies	8	20,100	17,172
Total: Orange Free State Societies	15	208,600	119,287
Natal Societies:			
Societies for sale of produce and supply of farming requisites	1	5,000	2,631
Dairy live stock societies	6	19,300	13,746
Total: Natal Societies	7	24,300	16,378
Cape Societies			
Societies for the sale of milk	1	2,500	2,507
Total: Union of South Africa	39	712,000	499,856

§ 4. STATISTICS OF SALES AND PURCHASE SOCIETIES.

Table II gives some statistics relating to societies for the sale of produce and purchase of farming requisites:

TABLE II. — *Societies for the Sale of Produce and the Purchase of Farming Requisites.*

	Number of members	Advances from Land Bank		Sales in 1919			Profit (or loss) on year's working
		Granted	Outstanding on 31 Dec. 1918 (Exclusive of interest)	Produce	Farming requisites	Total	
		£	£	£	£	£	£
Transvaal Societies:							
Central Westelike Ko-operatieve Landbouw Vereeniging	499	100,000	90,931	80,395	29,338	109,923	108
Ermelo Ko-operative Vereeniging	203	30,000	14,985	69,000	10,500	79,500	687
Heidelberg Ko-operatieve Landbouw Vereeniging	221	30,000	13,500	43,000	1,500	44,500	291
Hoogeveld Eendracht Ko-operatieve Vereeniging	473	49,000	29,437	32,565	11,103	43,668	3,340
Koster Ko-operative Landbouw Vereeniging	505	35,000	20,817	19,700	8,600	28,300	630
Lichtenburg Ko-operatieve Landbouw Vereeniging	1,296	39,000	35,562	63,440	14,000	77,440	53
Lijdenburg Ko-operatieve Landbouw Vereeniging	330	3,500	—	38,000	6,500	45,500	1,845
Magaliesberg Ko-operatieve Tabakplanters Vereeniging	2,275	30,000	—	(1) 44,875	—	44,875	7,299
Marico Boeren Ko-operatieve Vereeniging	172	5,000	3,434	6,555	1,632	8,187	(— 438)
Middelburg Landbouwers Ko-operatieve Vereeniging	633	62,500	42,227	73,660	27,240	100,900	166
Pretoria Landbouw Ko-operatieve Vereeniging	46	12,500	7,997	—	—	—	—
Rustenburg Boeren Ko-operatieve Vereeniging	732	24,000	20,368	19,100	9,100	28,200	276
Standerton Ko-operatieve Boeren Vereeniging	456	53,100	29,199	58,600	13,670	72,270	128
Waterberg Landbouw Ko-operatieve Vereeniging	100	6,000	3,905	4,130	1,960	6,090	313
Wolmaransstad Ko-operatieve Landbouw Vereeniging	305	30,000	23,888	20,175	9,087	29,262	1,080
Orange Free State Societies:							
Excelsior Ko-operatieve Zuivel Vereeniging	35	6,000	4,248	(2) 1,500	—	1,500	21
Frankfort Ko-operatieve Landbouw Vereeniging	196	27,000	20,000	31,680	8,860	40,540	1,089
Hobhouse Ko-operatieve Zuivel Vereeniging (3)	—	1,200	1,200	—	—	—	—
Kestell Ko-operatieve Zuivel Vereeniging	88	7,000	3,175	(2) 4,000	105	4,105	486
Lindle Boeren Ko-operatieve Vereeniging (3)	132	63,000	33 050	—	—	—	—
Senekal Ko-opetieve Landbouw Vereeniging (3)	175	54,000	29,925	—	—	—	—
Vrede Ko-operatieve Landbouw Vereeniging	490	30,000	14,609	19 000	16,700	35,700	1,649
Natal Societies:							
Ennerdale Farmers' Co-operative Society	38	5,000	2,565	—	—	8,830	13
Cape Societies:							
East London Dairy Farm Products Co-operative Society (3)	17	2,500	2,500	—	—	—	—

§ 5. The Central Agency for Co-operative Societies.

The Central Agency for Co-operative Societies, Ltd., which acts as broker for those societies affiliated to it in the sale of produce and the purchase of requirements, has increased its capital from £1,800 to £50,000. It is in a sound financial position as its accumulated reserves were £11,700 on 30 June 1918. The Land Bank guaranteed the due performance by the Agency of its obligations under a contract to supply the Rand Mines with 190,000 bags of maize during the year ended 31 July 1918. The contract was duly completed. Two further guarantees were issued during the year 1918 : (*a*) for £22,750 in respect of 1,300 bales of grain bags, and (*b*) for £36,000 under a contract to supply 180,000 bags of maize to the Rand Mines during the year ending 31 July 1919. The Bank's liability was limited to 4*s*. for each undelivered bag of maize.

The Agency has been particularly successful in supplying grain bags at reduced prices. It is estimated that in 1917-18 the members of co-operative societies obtained grain bags through the Agency for about £20,000 less than they would have paid if they had purchased them from storekeepers.

§ 6. General progress of the movement.

We append some general remarks on the progress of the co-operative movement extracted from the Report of the Department of Agriculture. They relate, be it noted, to the year ended 31 March 1918 :

" On the whole a considerable improvement has been manifested during the year; the well-managed societies have continued to progress and the weaker ones are beginning to realize what their duties are and what they must do to succeed. Greater care is being exercised in the admission of new members and undesirable members are being eliminated as opportunity offers. The giving of credit which has proved the downfall of several societies, is being greatly restricted and some societies are conducting their business entirely on a cash basis. It is recognized that credit is as essential to farming as to any other business, but it should be supplied by agencies specially constituted for that purpose, such as credit societies or separate branches of general societies. The granting of excessive advances for produce sent to the societies for sale has been discontinued and so it is hoped has the disposition to speculate and, on the part of some societies, to infringe the law by trading with non-members. The management of the societies generally is much better than it was, but the working expenses of the majority of them are still unduly high, caused mainly by the size of the staffs and the smallness of the turn-over, and every effort should be made to reduce them ; this applies particularly to societies whose operations are confined to simple transactions like the sale of maize and in this connection the feasibility of centralizing the accounts of the societies, as suggested by the General Manager of the Land Bank, or of getting the books made up by

itinerant bookkeepers supplied by the Central Agency, is well worth considering."

The Report of the Department of Agriculture also notes the lack of interest shown by members in the working of the society, and urges the formation of small societies or of branches of large ones, so as to afford to as many people as possible the opportunity of coming into contact with them. It further recommends that endeavours should be made to educate and interest the members by means of printed matter and other propaganda.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

CEYLON.

THE PROGRESS OF CO-OPERATIVE CREDIT IN 1918-19. — *Ceylon Administration Reports · Report of the Registrar of Co-operative Societies for* 1918-19. Colombo, 1919.

During the year ended 31 March 1919, the high cost of the necessities of life, the shortage of money, and the influenza epidemic all tended to retard the progress of the agricultural co-operative movement in Ceylon, but in spite of these drawbacks steady and satisfactory progress was recorded. The principles of the movement are assimilated but slowly, so that it generally takes newly formed societies two years before they begin to make sound progress. There are now, however, some societies which are working in an admirable manner.

Eleven new societies were registered in 1918-19, of which 7 were in the Southern Province. No societies were removed from the register during the year, but there are still three societies which are not considered to be working satisfactorily; these societies will be wound up if progress is not made. The existing societies are thus classified: 57 as "good"; 29 as "fair"; 10 as "bad"; 2 as "recently formed" and 5 as "not working"; total, 103.

The following table shows the progress in the number, membership, paid-up share capital and reserve fund of the societies, dividing them into "agricultural" and "non-agricultural" societies:

TABLE I. — *Number of Societies, Membership, Capital and Reserve.*

Year	Number			Membership			Paid-up Share Capital			Reserve Fund		
	Agricultural	Non agricultural	Total	Agricultural	Non agricultural	Total	Agricultural	Non agricultural	Total	Agricultural	Non agricultural	Total
							Rs	Rs	Rs	Rs	Rs	Rs
1915–16	54	1	55	4,036	32	1,068	20,059	175	20,235	1,162	3	1,465
1916–17	68		71	5,966	61	6,027	32,707	286	32,991	3 222	23	3,245
1917–18	89	3	92	9,285	266	9 551	46,181	2,367	48,549	6 452	222	6 675
1918 19	100	4	103	11 126	281	11,310	64,117	4 010	68 127	10 42	400	11, 13

The aggregate balance sheets of the societies in 1917-18 and 1918-19 are shown in the following table

TABLE II. — *Aggregate Balance Sheet*

Assets	1917 18	1918 19	Liabilities	1917 18	1918-19
	Rs	Rs		Rs.	Rs
Cash in hand . . .	689	7,9 6	Loan from Government and others	7,076	14,811
Cash in bank .	6, 55	11,692	Deposits from members	2 954	4 772
Loans due by members.	50,209	70,938	Share Capital	45,519	68, 62
Reserve fund in bank.	1,954	2,059	Interest and bonus due by societies . . .	392	1,161
Value of stock in hand.	836	5,111	Reserve fund	6,675	11,243
Other items	1 255	2,015	Other items	382	810
Total	66,029	101,256	Total . . .	66,029	101 256

For the purpose of simplification, cents have been omitted in this and the previous table, this produces some slight apparent discrepancies in the totals

The following table shows the increase in the loans.

TABLE III. *Loans.*

Year	Loans given		Loans recovered		Loans outstanding	
	No.	Amount Rs.	No.	Amount Rs.	No.	Amount Rs.
1916-17	956	28,381	501	15,222	680	27,818
1917-18	1,127	41,707	761	31,305	1,316	50,209
1918-19	—	71,605	—	50,935	—	70,605

The Report does not state the number of loans given, recovered or outstanding in 1918-19. The amounts sufficiently indicate, however, the increased volume of work done by the societies. Rates of interest on loans vary from 6 to 12 per cent.

The repayment of loans has improved, but legal action has had to be taken against some defaulters. The influenza epidemic made it necessary to extend the period of several loans. The purposes for which loans were issued during the year were: purchase and lease of land; purchase of seed, cattle, carts and manure; maintenance of labour in agricultural work; carpentry and furniture manufacture; gold, silver and iron work; sewing and dressmaking; trading in provisions; wood sawing; and the redemption of old debts.

The paid-up share capital continues to be the principal source of the money used for making loans to members, but deposits have substantially increased. The rates of interest on deposits range from 2 to 5 per cent. Another source of working capital is the loans granted by the Loan and Development Commissioners. Nine such loans were granted to societies during the year. These amounted to Rs. 5,550. A total of Rs. 261 was refunded to Government during the year as instalments of loans and interest thereon. Up to 31 March 1919 sixteen societies had received Government loans to a total amount of Rs. 9,935, of which Rs. 749 had been repaid. Loans to societies are made at 5 per cent. interest and repayment of instalments and payment of interest begin two years after the date of the receipt of loans.

The total profits earned by all the societies during the year was Rs. 7,297 and the working expenses amounted to Rs. 1,179, leaving a nett profit of Rs. 6,117. Seven societies have declared bonuses to members on their shares and Rs. 1,180 were set apart for this purpose.

The supply of agricultural requisites by the societies continues to develop. The main item is manure for paddy and vegetable crops. The following table shows the progress made:

TABLE IV. — *Manures purchased.*

Year	Quantity		Cost
	Tons.	wt.	Rs.
1915-16	81	12	6,844
1916-17	99	13	7,528
1917-18	160	2	13,591
1918-19	233	6	25,600

These manures were obtained from the Colombo Commercial Company on a credit of eight months and a discount of 5 per cent. An increase of Rs. 30 per ton in bone manure for paddy at the end of 1918 had a tendency to retard business in manures somewhat, but the high prices for paddy stimulated their use. All orders for manures continue to be made through, and with the sanction of, the Registrar.

In five districts agricultural shows were held under the auspices of co-operative societies. Four societies held garden competitions; the prize money was voted by the Ceylon Agricultural Society and was credited in the pass books of the winners as subscribed share money.

SPAIN.

1. THE REORGANIZATION OF THE CHAMBERS OF AGRICULTURE. — *Gaceta de Madrid*, No. 252, Madrid, 9 September 1919.

The chambers of agriculture in Spain were originally organized by Royal Decree in 1890 with the object of giving to agriculturists the means of promoting and defending their interests which the industrial and commercial classes already possessed. They have not, however, been as useful as it was hoped they would be, mainly because the real cultivators of the soil remained aloof from them and because they did not possess the means necessary for the effective encouragement of agriculture and stock-breeding. It has, accordingly, been decided to reorganize them and a Royal Decree was issued for this purpose on September 2nd.

It is provided in this decree that there shall be official chambers of agriculture in each province which shall be attached to the Ministry of "Fomento" and shall be consultative bodies of the administration. As such, they must be given an opportunity of expressing their views on bills and proposals for agricultural reform, arrangements relating to food sup-

plies, reforms of taxation, of valuation, of customs regulations and of social laws in general.

Besides being authorized to submit resolutions and to propose reforms to the legislature, the chambers will have a large field of activity in the organization of agricultural shows, the purchase of requisites and sale of produce; the reclamation of uncultivated land; the promotion of agricultural education and diffusion of agricultural information: arbitration in questions submitted to them by the interested parties; criminal proceedings against persons who adulterate agricultural products; the formation of savings banks, insurance societies, labour exchanges, etc.

The chambers will consist of not less than 15 nor more than 30 members, the number being fixed for each chamber by the Ministry of "Fomento." The members will be elected from amongst and by vote of the farmers who pay taxes of not less than 25 pesetas per annum in respect of rural property or live-stock. All such persons who are of age will be entitled to vote, but only those over twenty-five years of age will be eligible for election. Members will be elected for four years and one half will retire every second year.

To the elected members will be added as *ex officio* members, the chief engineer of the Service of Land Valuation (in the provinces in which that service exists), the chief engineer of the Forestry Service, the provincial veterinary inspector, and the presidents of the federations of agricultural syndicates where such organizations exist.

The members who compose the chamber may be divided into two groups, to deal respectively with matters relating to tillage and stock-breeding, but all proposals made by either group must be submitted for confirmation to a full meeting of the chamber.

Besides the members who officially compose them, the chambers may nominate a certain number of additional members who may take part in the discussions and may vote on whatever questions the chambers may think fit to allow them to vote upon. The persons who are eligible, for nomination as additional members are farmers or stock owners of ten years' standing, persons who have been engaged for ten years in some industry connected with agriculture or stock-breeding, agricultural or forestry engineers, agricultural experts, assistants in the Forestry Service, professors of agriculture, stock-breeding or allied industries in official teaching institutions, provincial veterinary inspectors, etc. The total number of additional members must not exceed one third of the number of ordinary members.

The chambers of agriculture will themselves decide what contributions towards their expenses shall be paid by the persons composing the electoral body, membership of which is compulsory for all persons having the qualifications laid down for electors. The chambers of agriculture may also acquire any kind of property by legacy, donation, subsidy, etc. They must submit annual estimates of general expenses to the Minister of "Fomento" as well as special estimates for each work they undertake or service they administer, and must furnish an annual report of their work.

All the chambers of agriculture at present existing in chief towns of provinces must be reorganized in accordance with the provisions of the new decree, but those which have been formed in other places will continue to be regulated by the Royal Decree of 14 November 1890.

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2. THE RURAL BANKS' LOANS ON DEPOSIT CERTIFICATES. — *Gaceta de Madrid*, No. 245, 2 September 1919

The royal decree of 22 September 1917 as to agricultural syndicates, rural banks and institutions allowed these bodies to make use of deposit certificates for transactions of the kind made permissible for the general warehouses. But for fear this authorization should give rise to abuses and inconvenience, Article 21 provided that the institutions which acted as depositories might not authorize loans granted on the security of deposited goods. This prohibition might however in some cases not only militate against but even entirely cancel the advantage the legislature proposed to grant to farmers by this decree, that namely of rendering their policies insuring deposited goods negotiable.

For this reason and also in consideration of the fact that, the form of Spanish syndicates being what it is, the danger of abuses was not grave, the royal decree of 30 August 1919 provided that the last paragraph of the aforesaid Article 21 should read as follows:

" Rural banks and unlimited liability credit institutions, constituted as sections of agricultural syndicates and registered as by the law of 28 January 1906, may obtain loans on goods deposited in general deposit warehouses formed by their own agricultural syndicates, as by a right granted by the present decree. Rural banks having collective and unlimited liability are similarly empowered, if they have conformed with the law as to syndicates and registered as syndicates, so that they can avail themselves of the right granted by Article 15 of the aforesaid decree of 22 September 1917 ".

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3. THE FARMERS' ASSOCIATION OF SPAIN IN 1918-19. — *Memoria de los trabajos realizados por la Asociación de Agricultores de España durante su ejercicio económico-social del 1º de Mayo de 1918 a 30 de Abril de 1919*, in the *Boletín de la Asociación de los Agricultores de España*, No. 120. Madrid, May 1919.

The annual general meeting of the Farmers' Association of Spain (*Asociación de Agricultores de España*) was held on 13 May 1919. A Report was presented by the council on the work of the Association in the year ending 30 April 1919, in which it was stated that the Agricultural Congress organized by the Association in co-operation with the Stockowners' Association and the National Catholic Agricultural Federation was held on 15 May 1918 and passed a series of recommendations, some of which had since been carried into effect by the public authorities.

The second Motor Cultivation Congress (*Asamblea de Motocultivo*) organized by the Association was also held in May 1918, but the recommendations made to the Government with a view to the encouragement of motor cultivation were not carried out.

The Association made many protests against the orders issued first by the Food Commission (*Comisaría de Abastecimientos*) and afterwards by the Ministry of Food (*Ministerio de Abastecimientos*), urging that they were prejudicial to the interests of the agricultural producer and notably to those of the cereal-grower. These protests were not, however, very effective and their ill success is attributed by the Report largely to the want of support on the part of those whose interests the Association was endeavouring to defend.

It was decided to convoke a National Agricultural Congress (*Asamblea Agrícola Nacional*) and to submit some resolutions to it, but owing to the influenza epidemic it had to be postponed.

The Association prepared a memorandum on the Bill presented to the Cortes for the establishment of a National Agricultural Institute and submitted it to the Committee of the Senate.

The association addressed itself to the public authorities urging the free distillation of wines as a means of overcoming the crisis in viticulture; asking for facilities for obtaining spirit, etc., for agricultural motors; urging that a motor cultivation competition should be held, and asking for an effective campaign against locusts.

In November 1918 a manifesto was addressed to the Cortes setting forth the views of the Association on the new taxes which were then announced.

The bills relating to increment of value and the taxation of real property were carefully studied by the Council but owing to the the political changes which took place and to the prorogation of Parliament, it was not possible to present any statement.

The number of matters to which the Council gave its attention was such as to compel it to meet weekly instead of monthly. It had under consideration proposals for changing the organization of the Association by creating various sections, whereby its work might be specialized and intensified. It was also proposed to enlarge the Council and to give direct representation upon it to the affiliated agricultural associations.

In December 1918 a note was submitted to the Government urging that due attention should be given to the vine-growing interests in making the Commercial Convention with the United States.

One of the most successful steps taken by the Association was in urging the Ministry of "Fomento" to organize the insurance of crops against fire. It was as a result of this step, that a Royal Decree was published authorizing the Marine Insurance Committee (*Comité de Seguros Marítimos*) to undertake on behalf of the State the insurance of crops (1).

With a view to giving greater security to persons and property in

(1) See our issue of June-July 1918, page 381.

the country, regulations were drawn up for the establishment of a National Police Force (*Somatén nacional*) and submitted to the President of the Council of Ministers and to the Minister of War.

The total receipts of the Association in 1918-19 were 41,714 pesetas and the total expenses 41,588 pesetas.

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4. THE GENERAL STOCKOWNERS' ASSOCIATION (LA ASOCIACION GENERAL DE GANADEROS). — *La Industria Pecuaria*, Nos. 617, 618, 619, Madrid, 1, 10, 20 March 1919.

The General Stockowners' Association is an old established and important body which represents the live-stock interests of the whole of Spain. Individual members pay a subscription varying according to the number of head of stock which they possess, the minimum being 10 pesetas a year. Societies, syndicates, etc., which are members pay subscriptions varying according to the number of head of stock which their members possess in the aggregate ; the minimum is 25 pesetas a year.

The Association is administered by a Permanent Committee of 30 members. This Committee has appointed seven sub-committees which deal respectively with (1) Special questions submitted for study ; (2) Mountain pastures ; (3) Shows, competitions and the encouragement of stock-breeding ; (4) Credit for stock-breeding and promotion of organization ; (5) Co-operative purchase and sale ; (6) Subsidiary industries and live-stock hygiene ; (7) Regulation of prices, commercial relations and economic questions.

There are also four sections to study methods of encouraging (1) the breeding of horses, (2) the breeding of cattle and pigs, (3) the breeding of sheep and goats and (4) rural industries and industries subsidiary to stock-breeding.

The Association employs a number of experts whose services are placed gratuitously at the disposal of the members.

Provincial associations or committees have been established in most of the provinces and local committees in more than 4,000 districts.

While taking account of the different conditions which prevail in different parts of Spain, the Association has taken general action to defend stockbreeding interests, urging upon the Government that due consideration should be given to those interests in the framing of commercial treaties and agreements and protesting against ill considered action on the part of the public authorities which might be harmful to them.

The Association has done much to improve the live stock shows in Spain and has spent many thousands of pesetas in giving subventions to such shows.

Much has also been done to encourage the dairy industry, chiefly by giving practical instruction, but also by making analyses of milk, cheese

and butter, by organizing shows of dairy cattle, by forming co-operative societies, syndicates, etc.

In order to combat disease amongst live stock, the Association supplies veterinary advice, makes bacteriological analyses, obtains for its members the various kinds of serum or vaccine required for inoculation against anthrax, swine fever and other diseases, and makes constant representations to the Government in regard to the carrying out of the Law on Live-stock Diseases.

The Association also encourages in a variety of ways the cultivation of forage-plants, and purchases large quantities of feeding stuffs for its members. It has also undertaken the sale of live stock and of wool and other animal products.

A Credit Bank was recently formed by the Association and makes loans to individual members varying from 500 to 3,000 pesetas and to society members varying from 3,000 to 10,000 pesetas. The period for which loans are granted is the year and the interest charged in 4 per cent. Individual borrowers either give personal security or pledge stock, wool, etc., while societies obtain loans on the collective guarantee of the members.

Other directions in which the Association is active are in giving legal advice to its members and in assisting in the construction of roads.

SWITZERLAND.

PREMIUMS AND SUBSIDIES GRANTED TO STOCK-BREEDING AND AGRICULTURAL ASSOCIATIONS BY THE SWISS FEDERATION. — *Rapport du Conseil fédéral à l'Assemblée fédérale en* 1918: *Département de l'économie publique. Feuille fédérale Suisse*, Vol. II, No. 20. Berne, 21 May 1919.

A. *Stock-breeding Syndicates.* The Swiss Federation encourages the enterprise of stock-breeding associations by premiums which are granted in the year previous to that in which they are paid. The grant must therefore be distinguished from the actual payment which usually takes place a year later.

In 1917, 44 premiums, amounting to 5,168.80 francs, were granted to pig-breeding associations; and in 1918 the sum of 4,641.80 francs could be paid on these premiums. In 1916 the premiums granted amounted to 5,183.20 francs, and the payments made in 1917 amounted to 4,724.20 francs. Ten cantons benefited by these federal premiums. The associations for breeding goats of pure race obtained 191 premiums amounting to 16,178.75 francs in 1917, and the premiums paid in 1918 numbred 158 and amounted to 13,679.15 francs. In 1916 the premiums granted numbered 196 and amounted to 15.728.62 francs, and 153 premiums amounting to 12,935.97 francs were paid in 1917. Twelve cantons benefited by these premiums.

The following figures regard the premiums granted in 1918 and therefore falling due in 1919:

Kind of animal	No. of associations	No. of animals winning premiums	Amount of premiums
Pigs	49	1,535	5,982 francs
Goats	211	8,137	16,894 »
Sheep	15	7,111	1,428 »

Fourteen cantons benefited by these premiums.

The Federation also makes grants towards the expenses of installation to newly founded associations which are concerned with stock breeding, and these grants are called " foundation subsidies ".

Eighteen cattle-breeding associations obtained federal grants, amounting to 4,850 francs, for their expenses of installation in 1918. These associations were distributed among nine cantons.

In the same year eleven grants, amonting to some thousand francs, were made to associations of breeders of small live stock. Nine cantons benefited by these grants.

B. *Agricultural Societies and Associations.* — The principal agricultural associations in the country are said to have received in 1918 the total federal grants made them.

The associations in question were the following:

	Amount of federal grant
(1) Swiss Society of Agriculture	24,000 francs
(2) Federation of Agricultural Societies of Romanic Switzerland	13,500 »
(3) Agricultural Society of the Canton of Tessin	3,500 »
(4) Swiss Society of Alpestrian Economy.	6,500 »
(5) Swiss Society of Horticulture	7,500 »

The *Swiss Peasants' Union* received a federal grant of 40,000 francs, namely 25,000 francs for the Swiss Peasants' Secretariat and 15,000 francs for the enquiry into the yield of Swiss farms. The balance-sheet for 1918 also provided for a credit of 10,000 francs for making grants to *seed selectors' societies*, of which eight arose in as many Swiss cantons. These associations took part in supplying seed in 1918 and immediately, even in their first year of activity, rendered signal services, especially to grain growing. Foundation subsidies, varying in amount from 500 to 800 francs according to the size and activity of the society, were granted to these societies and reached the total sum of 4,800 francs.

Part II: Insurance and Thrift

SPAIN.

NATIONAL MUTUAL INSURANCE OF THE PRODUCTS OF AGRICULTURE AND STOCKFARMING.

OFFICIAL SOURCE:

REAL DECRETO CREANDO UNA INSTITUCIÓN DENOMINADA «MUTUALIDAD NACIONAL DEL SEGURO-AGRO-PECUARIO».

§ 1. CAUSES OF THE FOUNDATION OF THIS INSURANCE.

The Minister of *Fomento*, by a royal decree of 9 September 1919, founded the *Mutualidad Nacional del Seguro Agro-Pecuario*, the institution of which the name constitutes our title and which meets a need apparent to all who belong to the world of Spanish agriculture. The institution in question insures against the risks of agriculture and stockbreeding and is endowed with economic and technical resources which guarantee its efficacity. In obedience to the practical dictates of modern insurance, it will not confine itself to purely administrative management. Thus while it will classify and select risks, calculate tariffs, recover premiums, and pay benefits falling due when losses occur, it also aspires to fulfilling other functions of a social and scientific character which are today quite indispensable to an institution of its kind.

It will have to take technical conditions into account, and will have to give a quite special care to two departmens of its work — propaganda and research. With this object it will publish popular advertising leaflets, pamphlets, posters, graphs and bulletins; it will organize lessons, courses and lectures; and with a less popular intent it will analyse the data supplied by experience with a view to selecting risks, determining their topographical distribution and their causes, and repairing the losses which accompany them.

Although the *Mutualidad* is to cover all the risks to which agricultural wealth is exposed, that is both the risks of agriculture properly so called and those of stock breeding, the decree states that with a view to reaching a greater efficiency of organization and development this institution should

assign an order of preference to the various kinds of rural insurance and begin with that against hail. This preference is justified on the ground that hail, which affords the true type of insurable risk, causes enormous loss in Spain, and that the resources with which the Treasury aids insurance against these risks, as circumstances require, have consequently largely increased. The necessity of organizing this insurance so that there should be indemnification for losses was most urgent. Private initiative in Spain went beyond State action in this matter and organized mutual insurance, making a satisfactory experiment of it which proved that the method adopted was good and that an advance on it was possible and would be useful.

In this connection the *Asociación de Agricultores de España* deserves special mention for it established a department for insurance against hail, as did also the *Confederación Nacional católico-agraria*, which has in some of its federations sections in which various kinds of agricultural insurance are practised in praiseworthy conditions, and *La Edetana* and other mutual societies which cover the risks of their members' crops.

The Spanish public authorities propose to co-operate with these institutions in this branch of their work. They will be called upon to form part of the new organization by means of which it is intended to extend the enterprise they have begun and render it more effective. The national institution will also utilize as its own delegations and agencies the district, provincial and local organizations of private mutual societies which enter into a contract with it in order that they may participate in the insurance. It will thus co-ordinate under a single management the efforts of all, with a view to rendering them more productive.

The organization we are examining is nothing more than a system by which the transition can be made to the compulsory insurance which the government has already begun to study. Its principal object is to regulate effectively the State's large contribution to the repair of losses, a contribution which if less burdensome than it might be to the public Treasury is also insufficient, being spread over a considerable number of losses. This State assistance is sporadic and irregular and is exposed to all the inconvenience attendant on clumsy distribution. It was therefore a matter of urgency to utilize more scientifically both the resources supplied by the public Treasury and the existing directive, co-ordinating and stimulative forces, and hence arose the necessity for intensifying the insurance by means of this transitional system which is a step towards compulsory insurance.

The general lines of the scheme, which are to be developed in the subsequent rules, are such that they give to the *Mutualidad Nacional del Seguro Agro-Pecuario* all the guarantees, whether of technique or of material resources, which can render it worthy of the country's trust.

Finally, as regards State intervention, this is confined to supreme inspection and continual supervision, and to the State's contribution, in the measure necessary in the case of institutions of this kind, of the initial capital which is repayable.

Having briefly described the aims of the royal decree in question and its causes, we will now examine its chief provisions.

§ 2. AIMS AND ORGANIZATION OF THE INSURANCE.

This decree founds an institution to be called the *Mutualidad Nacional del Seguro Agro-Pecuario* and to have the following aims :

(1) to spread the doctrine of thrift and develop its practice where all forms of agriculture and stockfarming are concerned ; (2) to organize and administer mutual insurance against the various risks to which agricultural wealth may be exposed ; (3) to draw up the statistics of this insurance and accomplish the necessary investigations, with a view both to lessening risks and applying the insurance better.

The *Mutualidad Nacional del Seguro Agro-Pecuario* will be an autonomous institution having its own legal personality, administration and funds, distinct from all powers and resources derived from the State As such it will be able to acquire, hold and alienate property, contract loans and take all convenient legal action within the sphere defined by its rules.

It will be especially charged to acquaint farmers with the advantages of the insurance, and for this object and with a view to propaganda it will publish tracts, pamphlets, advertising leaflets, posters, graphs and bulletins, organize popular lectures and lessons, competitions, discussions, congresses and meetings, and employ all other methods of propaganda which it deems useful.

Masters charged with the instruction of adults will be recommended to include thrift as touching agriculture and stockbreeding in the subjects they teach.

The *Mutualidad Nacional* will devote particular care to drawing up statistics as to the insurance of agricultural produce and live stock. Where insurance against hail is concerned, the statistics as to storms drawn up with a scientific object by the Spanish meteorological department will be taken as basis, and to this end the *Mutualidad Nacional* will get into touch with the central office of this department in order to obtain the data of interest to itself as to the practical results attained.

The collection of statistics as to losses and their extent and intensity will be organized so that the fullest guarantees of accuracy and independence are afforded. The collection of these statistics will be, in each province, the duty of the State agricultural department, which will by preference employ State officials as agents.

The comparison and study of these two sets of statistics will be among the duties of the *Mutualidad* and will supply a basis for the valuation necessary to the estimation of losses and the progressive modification of tariffs.

The *Mutualidad Nacional* will begin its activity by organizing mutual insurance against hail in a direct form applicable to all crops and all districts of the country, and in a form which admits the participation of institutions allowed to co-operate with itself.

Afterwards the *Mutualidad* will extend its activity to the other branches of insurance within its competence, in accordance with the relevant

prescriptions of the rules, provided always it obtains the consent of its council (*Consejo del Patronato*), and provided these insurances square, as regards their working, with the technical system established by the *Mutualidad*.

The mutual societies accepted by the *Mutualidad* will co-operate with it. They will cede to it all or part of their risks. The terms of such cession will be regulated, in accordance with the exigencies of each case, by common agreement and by contract between the *Mutualidad Nacional* and the mutual society in question.

The following property constitutes the capital and reserve of the *Mutualidad*.

(1) a foundation capital of 500,000 pesetas, which will be paid by the State and will be repayable out of the reserve funds to be constituted by the *Mutualidad* in the form which will in due time be determined;

(2) The amount of premiums, subscriptions and shares of various kinds;

(3) The product of the sale of publications,

(4) Donations and legacies which the *Mutualidad* may receive in its official or private capacity;

(5) Every other legitimate receipt, allowed and approved by the committee;

(6) Interest or revenue on the society's funds.

The *Mutualidad Nacional* will have its offices in Madrid. It will organize district, provincial or local delegations and agencies in the form determined by the rules.

It will be generally represented and directed by a council which will have the following duties: annually to determine the kinds of insurance to be afforded; to classify risks and fix the required tariffs, together with corresponding policies and contracts; to take part in approving the contracts into which the *Mutualidad Nacional* enters with other insuring institutions; to inspect the book-keeping and management of co-operating mutual societies when this seems necessary; to consent to the employment of the society's capital and reserves; to establish the list of its employees, to dispose of its assets and liabilities; to draw up its annual budgets; to examine and approve its balance-sheets; to propose to the government the reforms touching agriculture and stockbreeding which the system of thrift implies; and to fulfil the other functions determined by its rules and regulations.

The council will consist of nine members having a right to a seat, five experts, and a varying number of representatives of insuring institutions connected with the *Mutualidad Nacional*.

The members having a right to belong to the council will consist of one representative of each of the following institutions:

(*a*) General Direction of Agriculture, Mines and Forests; (*b*) National Institute of Thrift (*Instituto Nacional de Previsión*); (*c*) General Commissariat of Insurance (*Comisaría general de Seguros*); (*d*) Institute of Social Reforms (*Istituto de Reformes sociales*); (*e*) Institute of Geography and Statistics (*Instituto Geográfico y Estadístico*); (*f*) Official Insurance Commit-

tee (*Comité Oficial de Seguros*); (*g*) Spanish Farmers' Association (*Asociación de Agricultores de España*); (*h*) General Stockowners' Association (*Asociación general de Ganaderos*); (*i*) that institution representing groups of federations of agricultural associations which has enrolled the largest number of them.

Every mutual society having a membership of at least 1,200 may nominate one member of the council. A mutual society having a membership of less than 1,000 may group itself with one or more other such societies in order to nominate their representatives.

The representatives of the mutual societies will be elected every year, persons already holding such office being eligible for re election. The five experts on the council will be chosen from persons of known competence in the business of mutual societies and will, with the chairman, form the executive committee of the *Mutualidad* which will be responsible for administering its affairs within the terms of the rules. One member of the executive committee, proposed by the committee and nominated by the council, will be acting manager of the *Mutualidad* and its administrative chief, and will discharge such technical and office duties as the State determines.

The president of the *Mutualidad* will be a chairman who will also hold this office on the council and the executive committee and who will be nominated by the government. The *Mutualidad* will have a general secretary who will be such also of the council and the committee. He will be nominated in the first instance by the government from the expert members of the council, afterwards by the council.

The management of the *Mutualidad* will draw up its balance-sheet in February of every year and its accounts will be closed, in readiness for submission to the council, on the 31st of December of the preceding year.

A special group of council-members nominated by the chairman, who must include the representatives of the insuring institutions, will examine the balance-sheets and books and report on them to the council at its ordinary meeting in March.

In October of every year the committee will draw up a budget for the following year, and this will be examined and approved at the council's ordinary meeting in November.

The *Mutualidad Nacional* will maintain relations with mutual societies existing at the time of its foundation and those subsequently registered.

ITALY.

COMPULSORY INSURANCE AGAINST DISABLEMENT AND OLD AGE.

SOURCES:

PROVVEDIMENTI PER L'ASSICURAZIONE CONTRO LA INVALIDITÀ E LA VECCHIAIA (*Provisions for Insurance against Disablement and Old Age*). Bill introduced by the Minister of Industry, Trade and Labour (Ciuffelli) to the Chamber of Deputies at the session of 28 November 1918. Acts of Parliament, No. 1066.

DECRETO-LEGGE LUOGOTENENZIALE 21 APRILE 1919, No 603, CONCERNENTE L'ASSICURAZIONE OBBLIGATORIA CONTRO LA INVALIDITÀ E LA VECCHIAIA PER LE PERSONE DI AMBO I SESSI CHE PRESTANO L'OPERA LORO ALLE DIPENDENZE DI ALTRI (*Lieutenancy decree-law 21 April 1919, No. 603, as to the compulsory insurance against disablement and old age of persons of both sexes working in dependence on others*). In *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 104, 1 May 1919.

INSOLERA (Prof. F.): L'assicurazione obbligatoria contro la invalidità e la vecchiaia degli operai. Una previsione dell'onere finanziario (*Compulsory Insurance against the Disablement and Old Age of Workmen. A Forecast of the Financial Burden*). *Annali del Credito e della Previdenza*. Ser. II. Vol. 18bis. Ministry of Industry, Trade and Labour. L. Cecchini, Rome, 1917

BAGNI (Prof T.). L'assicurazione obbligatoria contro l'invalidità e la vecchiaia (*Compulsory Insurance against Disablement and Old Age*). Ministry of Industry, Trade and Labour. Publication of the Social Thrift Department, No. 1. Tipografia della Camera dei Deputati, Rome, 1919.

In response to an old desire of the working class, compulsory insurance against disablement and old age was introduced into Italy by the decree-law of 21 April 1919, No. 603. This important measure, which is based on an analogous bill introduced into the Chamber of Deputies at the session of 28 November 1918 by the then Minister of Industry, Trade and Labour (Ciuffelli) and promoted by him, concerns not only the workmen and small employees of industry and trade but also agricultural labourers, *métayers* and small rent-paying tenants, and for this reason we purpose to notice its principal points. It follows at a short distance another decree-law which is not less interesting socially, that namely of 23 August 1917, No. 1450, by which compulsory insurance against the accidents of agricul-

tural labour, which came into force on the 1st of last May and with which we dealt in our issue for last March, was instituted.

§ 1. Voluntary insurance.

Before beginning an examination of the decree on insurance against disablement and old age – a decree informed by the principles, now generally received, that insurance should be compulsory and that the contributors to it should be three, namely the workmen, the employer and the State — we think it well to glance at the results obtained in Italy from 1909 to 1916 under the system of State-subsidized voluntary insurance. The agency of this insurance was the *Cassa Nazionale di Previdenza* (National Institution of Thrift) which was founded as an autonomous *ente morale* (corporation with non-commercial aims) by the law of 17 July 1898, No. 350, and which is now governed by the consolidated text of 30 May 1907, No. 376. This institution accepts for insurance Italian subjects of both sexes who do work which is mainly manual or who work by the piece or the day, including married women who do domestic work in a workman's house, and small artizans and small farmers who are not taxed at more than 30 liras. The State encourages workmen to insure with and make payments to this institution by itself making complementary payments to the account of all who pay at least 6 liras a year. The law does not determine the measure of these complementary payments, but allows the managing committee of the *Cassa Nazionale* to fix it year by year in proportion to the funds available. Hitherto the State has always paid 10 liras for every 6 liras paid by a workman, that is to say has increased by 166 per cent. the minimum contribution of a workman.

The right to a pension is generally recognized to reside in a man who has reached the age of 60, and in a woman, or a man following one of certain trades, who has reached the age of 55. It is however conditional on the insured person having for 25 years enrolled himself with the *Cassa Nazionale* as being insured, or for 10 years if his payments have amounted to a certain minimum.

The right to payments for permanent and total disablement is irrespective of age, but resides only in persons who have been enrolled as insured for at least five years. By permanent and total disablement that condition is meant in which a workman's normal earning capacity is reduced by at least one third. In such cases the *Cassa Nazionale* draws on its own funds in order that the pension payable may never be less than 120 liras.

Special and priviliged provision is made for the case of the collective enrolment for insurance of the members of a workmen's mutual aid society or of the co-operative production and labour societies. Another privileged provision, taking the form of grants of special additions to the payments by the insured, is made for the case of workmen who enrol themselves at an advanced age.

There are two rolls of the insured, the " mutuality roll ", in which

persons are entered whose payments take the form of an alienation of capital but whose heirs do not have any rights in these payments, and the "reserved contribution roll" in which persons are entered whose payments are returned to their heirs (children, wife or husband, parents) if they die before receiving the pension.

The annual number of applications for enrolment and of completed enrolments appears from the following table (1).

TABLE I. — *Number of enrolments* 1900-1916.

Year	No. of applications for enrolment	No. of completed enrolments		Total no. of enrolled at end of year
		In "reserved contribution roll"	In "mutuality roll"	
1900	10,759	5,832	4,656	11,468
1901	33,172	16,680	15,783	43,931
1902	50,062	23,684	23,940	91,555
1903	36,043	16,648	18,962	127,165
1904	20,581	10,937	9,049	147,151
1905	49,821	20,962	25,493	193,606
1906	27,619	13,722	12,821	220,149
1907	33,789	18,870	15,387	254,406
1908	34,672	15,186	18,193	287,785
1909	35,656	14,991	16,702	319,481
1910	41,764	17,719	17,529	354,729
1911	53,796	19,846	20,880	394,455
1912	50,166	12,282	9,412	416,149
1913	57,307	52,981	39,123	499,253
1914	43,462	23,386	9,405	532,046
1915	38,493	23 831	13,240	566,117
1916	35,652	30,724	5,633	602,474

The data as to the payments made by the insured persons are not less interesting to anyone wishing to acquaint himself with the efficacy of this system of voluntary, State-subsidized thrift. They are contained in the following table.

(1) In order to enrol himself, a man should apply at a secondary office of the *Cassa Nazionale* or at the Post-office, should fill in a form there supplied to him, and should add to it his birth-certificate and a certificate showing his trade on duty-free paper. At the same time he should make a first payment in a whole number of liras.

TABLE II. -- *Amount of payments* 1903-1916.

	Amount of payments received during the year	Average sum received per single person insured
	liras	lira
1903	2,291,981	18.02
1904	1,571,728	10.70
1905	2,340,263	12.06
1906	2,316,624	10.53
1907	2,876,870	11.31
15	3,256,642	11.32
1909	3,406,040	10.66
1910	3,963,725	11 18
1911	4,157,390	11 0
1912	5,287,900	12 76
1913	5,793,613	11 60
1914	6,565,195	12 34
1915	6,039,327	10 67
1916	7,060,214	11 73

The average contribution of an insured persons varies from 10 to 12 liras; but the *Cassa Nazionale* with its annual additions of ten liras has almost doubled these payments. The insured persons numbered 650,000 on 30 June 1918.

The small results which the system of voluntary insurance thus obtained, in spite of the use of the most ingenious forms of advertisement, explain why Italy has come to compulsory insurance, which had already been usefully in force in the country in several noteworthy instances.

§ 2. COMPULSORY INSURANCE ALREADY IN FORCE.

The principle of compulsory insurance has already been applied in Italy to several classes of trades.

Especially in its character as an employer of labour, the State has provided for the insurance by the *Cassa Nazionale* of certain classes of its employees, and has made special laws or rules for their enrolment. We recall the case of the workmen of tobacco factories (law of 16 June 1904, No. 259) and of the royal saltpits (law of 9 July 1905, No. 397), the case of waterworks guards employed on waterworks of the first and second categories (law of 18 July 1904, No. 367), that of workmen on tobacco plantations (royal decree of 22 March 1906, No. 163), and those of many other

classes of workmen, all enrolled as insured in obedience to a decree or a mere ministerial provision.

The classes outside the State's employees for whom insurance has been made compulsory are the following:— (*a*) Officials, workmen and employees of the branch railways conceded to private industry and of intercommunal tramways (laws of 30 June 1906, No. 272, and 14 July 1912, No. 835). These laws have, with a view to securing equal treatment for the staffs of these railways and tramways, obliged the employing firms to enrol their employees as insured by the *Cassa Nazionale di Previdenza*, unless these firms have their own systems of insurance, approved by royal decree. The contribution to the cost of insurance which it is incumbent on the firm to make is fixed at 4 or at 6 per cent. of the insured man's pay, according to whether he is a manual or other worker, and the contribution deducted from the insured man's pay is generally fixed at 2 or 3 per cent. thereof. (*b*) Workmen employed in shipyards (law of 13 June 1910, No. 306). The payment for insurance is fixed at 6 liras a year in every case and is paid in its entirety by the employer. (*c*) Workmen employed in auxiliary establishments (lieutenancy-decree of 29 April 1917, No. 670; 24 July 1917, No. 1185; 11 November 1917, No. 1907). These latter provisions, made during the war, constitute a first experiment on a large scale of compulsory insurance. They make compulsory the insurance of all workpeople of both sexes who are not more than seventy years old and enjoy any status as employees (permanent and casual workers, civilians and soldiers) of these establishments. The workers are divided, in accordance with the daily wages they earn, into four classes. The first class earns not more than 2.50 liras a day; the second from 2.50 to 4 liras; the third from 4 to 5 liras; the fourth more than 5 liras. The payment for insurance is fortnightly, and is in the first class 15 centesimi for a labourer and 50 centesimi for an industrial worker, in the second class 50 centesimi for a labourer and 1 lira for an industrial worker, in the third class 1 lira for a labourer and 1.50 liras for an industrial worker, in the fourth class 1.50 liras for a labourer and also for an industrial worker. The sixth part of such contribution goes to a fund which provides for involuntary unemployment while the remainder is for insurance against disablement and old age.

The number of workpeople employed in auxiliary establishments and compulsorily enrolled as insured by the *Cassa Nazionale*, in accordance with the measures we have cited, was 620,000 on 30 June 1918.

We will now pass to an examination of the chief provisions of the decree.

§ 3. Sphere and object of the insurance.

Compulsory insurance against disablement and old age covers all persons of either sex who are between the ages of 15 and 65 if they work in dependence on others (dependent workers) as labourers, foremen, employees, etc. in industry, trade and agriculture (including sport and fishing),

in public departments or liberal professions, and also if they work at home for the profit of others or are privately employed in any capacity. Among the persons compelled to insure *métayers* and rent-paying tenants are included if they habitually work with their hands on their holdings and if the ascertained or presumed rent of these does not exceed 3600 liras, these two conditions being imposed in order that only the tenants nearest to the other classes obliged to insure may enjoy the benefits of the insurance. Rent-paying tenants and *métayers*, who represent a notable part of the agricultural population, can be largely assimilated in many districts of Italy, as regards their economic and working conditions, to labourers properly so-called. They do not however work in dependence on others, and therefore they have certain characteristics in common with independent labourers — small artisans, small manufacturers and tradesmen, small holders. Whereas however it would, for various reasons, be impossible, at least at first, to apply a system of compulsory insurance to these latter independent labourers, it can be put it into practice in the case of the rent paying tenants and the *métayers*, whether because they can be dealt with individually, since it is possible to ascertain their income, or because they stand in relation to a person whose position approximates to that of an employer, namely the landlord, on whom falls the duty of making the employer's contribution to the insurance.

It is superflous to state that the description of persons as working in dependence on others must be taken in a wide sense. It includes, for instance, members of production and labour co-operative societies, of agricultural leaseholding societies, and of agricultural universities, as well as *coloni*, etc.

The obligation to insure does not fall on persons employed on work, other than manual, who are paid more than 350 liras a month, nor on workmen, agents or employees of the State, the provinces, the communes and public philanthropical institutions if the provision for their retirement, based on laws or rules, be not less than the pension they would enjoy under the decree we are considering. If it be below such level it must be suitably increased, on principles to be determined for individual cases after consultation with the Council of Thrift and Social Insurance.

According to calculations made by the Ministry, taking into account the results of the demographic census of 10 June 1911, the natural increase of the Italian population since that date and its increase by the inclusion of the irredentist territories, about 10 million people, or nearly half the population over 15 years of age, will come under the obligation to insure (1).

Beyond its principal aim of granting pensions in cases of disablement and old age, the insurance has the following secondary aims:

(1) To make grants to the widows and orphans of insured persons whose

(1) Foreigners working in Italy who are in one of the categories mentioned are subject to the obligation to insure in accordance with the rules of the decree we are considering, but do not benefit by the State's complementary payment unless a special agreement with the country of their origin has secured reciprocal treatment for Italian subjects inhabiting it.

death takes place before the pension is payable. These are true grants, made to enable the families to supply their first needs after they have lost their head. They consist of a monthly payment of 50 liras for six months to the widow or, failing her, to children under 15 years of age. Half this burden is borne by the State.

(2) The prevention and cure of disablement. The necessity is evident, both for social reasons and for reasons of a financial order, that all steps advised by science and practice for the prevention and cure of disablement be taken. The decree therefore enables the insuring institution to place a disabled person in a hospital and subject him to suitable treatment, and also to subject an insured person threatened with disablement to preventive treatment, naturally, in both cases, with the consent of such person. Attendant costs are, like the costs of preventing and curing disablement generally, borne by the insuring institution.

§ 4. Contributions and payments.

Provision for insurance is made by a contribution of which half is paid by the insured person and half by the employer. The State intervenes to pay a sum which brings the pension of each pensioner up to 100 liras a month.

Contributions are proportionate to the insured person's wages or salary, as follows:

For those whose daily pay is	Fortnightly contribution	
	Paid by the insured	Paid by the employer
—	liras	liras
Less than 2 liras	0.50	0.50
Between 2 liras and 4 liras	1	1
» 4 » » 6 »	1.50	1.50
» 6 » » 8 »	2	2
» 8 » » 10 »	2.50	2.50
More than 10	3	3

In other words, for the six classes of wage-earning persons mentioned above, annual (24 fortnightly) contributions are made of 25, 48, 72, 96, 120 and 144 liras, respectively, half being paid by the employer and half by the insured person. Comparing such contribution to annual wages, on the hypothesis that there are 300 working days in the year, and taking as basis maximum wages in the first and minimum wages in the sixth class but average wages in the other classes, we obtain the following results:

Class of wage-earner	I	II	III	IV	V	VI
Annual wages (in liras). . . .	600	900	1500	2700	2700	3000
Percentage of such wages to which total contribution of employer and insured is equal.	4	5.33	4.80	4.57	4.11	4.80

It may therefore be taken that this charge, which is halved by the employer and the insured person, represents to each of them a proportion of wages between 2 and 2.50 per cent.

The regulation for the execution of the decree will lay down rules for ascertaining earnings with a view to fixing contributions, and will make special provision for agricultural workers and their families as regards their earnings and the amount of their fortnightly contributions. The regulation will also define the term employer. In the case of *métayers* and rent-paying tenants the employer's contribution will be paid by the owner, the emphyteutic landlord or the usufructory of the land.

Contributions are normally receipted by fortnightly marks placed on cards made out in the name of each insured person. This system of giving receipts has seemed the most practical, but the option is granted of adopting any other method which the insuring institutions may consider, in the light of its experience, to be more suitable.

The obligation is placed on the employer of paying the contributions, of the insured persons as of himself, and he subsequently recoups himself by a deduction from wages to cover the amount due from the insured. This is the system laid down by all legislations and is the only effective one. Any agreement which the employer makes with a view to escaping from obligation to pay the quota due from him is null and void.

The decree also contemplates certain cases of *force majeure* in which the insured person does not earn and therefore cannot pay his contributions for a period which, for reasons of equity, is nevertheless held to count to him for a pension. The periods in question are those of military service and, up to the maximum limit of a year, those of sickness: during these periods the contribution due from the lowest class of wage-earners will be held to have been paid.

The right to a pension is recognized to reside : (1) in persons who have completed their 65th year and have made at least 240 fortnightly contributions, so that full contributions have been paid by them for at least 10 years ; (2) in persons of any age recognized to be permanently disabled for work, if they have made at least 120 fortnightly contributions, that is if their contributions have been paid in full for at least 5 years.

An insured person will be considered to be unable to work if his earning capacity have been reduced by at least one third from the habitual and normal earning capacity of persons exercising his trade in the same place as he.

When owing to an improvement in his condition this reduction in his earning capacity no longer exists, his pension may be suspended.

If his disablement result from an accident in the course of his work and if he be subject to the obligation to insure against accidents, the pension assigned to him will be so reduced that, together with the income he derives from the compensation paid to him for his accident, it does not exceed his annual wages. This provision is inspired by a principle which is fundamental to all systems of insurance, the principle, namely, that benefits should not exceed losses.

The pension is made up of two parts: (1) a part corresponding to the contributions of the insured person and the employer, equal to 66 per cent. of the total amount of the first 120 fortnightly contributions, 50 per cent. of the total amount of the next 120 fortnightly contributions, and 25 per cent. of the remaining contributions; (2) a part corresponding to the payment made by the State, fixed, as has been said, at 100 liras.

Pensions paid on these principles will be less than one third of wages in very few cases, and may exceed two thirds of wages and even, in some cases, total wages. They cannot be transferred or sequestered, except on behalf of public hospitals or asylums in order to meet daily charges incurred by the pensioners.

§ 5. Optional insurance.

Side by side with compulsory insurance, and analogously to the practice under similar foreign laws, the decree we are considering has introduced and made rules for a form of optional insurance open to the following classes of persons:

(1) Those who have lost the status of compulsorily insured persons;

(2) Compulsorily insured persons who wish to earn the right to a pension paid at a higher rate than that fixed by the decree;

(3) Independent workers whose ascertained or presumed annual earnings do not exceed 4200 liras;

(4) Married women occupied by domestic duties whose husbands are among the persons compulsorily insured;

(5) Women, not married to such men, who undertake domestic duties for them, if it appear that they have beyond their earnings no income of any kind on which they pay to the State, provinces or communes, rates or taxes amounting to more than 30 liras a year, that they follow no other calling, and that the care of a house is mainly entrusted to them;

(6) Small landowning farmers and small tradesmen, manufacturers and members of the liberal professions who pay to the State in direct taxation a sum not exceeding 200 liras and who are not included in (3).

Persons in some of these classes, namely those indicated under (2), (3), (4) and (5), have characteristics in common with the persons compelled to insure and may eventually themselves be subject to such compulsion. They have the right to a payment by the State complementary to their contributions. This payment is not however paid on the system pursued by the *Cassa Nazionale di Previdenza*, which, as we have said

annually pays, to the account of the persons it has enrolled as being insured if these have made an annual contribution of at least 6 liras, a complementary sum which legally may not exceed 10 liras and has hitherto stood at that figure. This system of making complementary payments is unrelated to the amount of the contributions of the insured persons, and has been proved to be ill adapted to encouraging them to raise their contributions above the minimum, while it gives rise to administrative complications, and necessitates laborious and complicated research and a very minute organization. The new decree lays down that the State's complementary payment will be made at the moment when each account is settled, will take the form of a complementary annuity for life, and will be equal, in the case of both voluntarily and compulsorily insured persons, to one sixth of the life income arising out of voluntary contributions.

For brevity's sake we pass over other simplifications and improvements which will cause the system of voluntary insurance to penetrate the masses of the population, and will popularize this free form of thrift which supports and completes compulsory insurance.

§ 6. The insuring agencies.

The affording of the insurance is entrusted to the *Cassa Nazionale di Previdenza per l'Invalidità e la Vecchiaia degli Operai* (National Insurance against the Disablement and Old Age of Workmen). The aims for which this institution was founded and the peculiar experience it has acquired during more than twenty years of activity, caused the duty of affording the compulsory insurance to be entrusted to it. Naturally, however, this *Cassa Nazionale* has been obliged, while preserving its autonomy, to modify its administrative agencies and its organization on making the change from voluntary to compulsory insurance. A first change affects its name which, to suit the new duties which have been assigned to it and which will be assigned to it as other forms of social insurance are brought into play, has been altered to *Cassa Nazionale per le Assicurazioni Sociali* (National Social Insurance). Another change affects its board of directors : it is now an established principle that under a system of compulsory insurance the insuring institutions must be managed by those concerned, who are in this case the employers, the insured persons and the State. The following will therefore be members of the board :

(1) Six representatives of employers and eight representatives of the persons compulsorily insured ; (2) two representatives of the persons voluntarily insured of whom one will be nominated by the mutual aid societies, co-operative societies of consumption, production and labour and kindred associations who have collectively enrolled their members as insured by the National Social Insurance ; (3) five members chosen from persons who are particularly skilled in the business of social insurance ; (4) an official representing the Ministry of Industry, Trade and Labour

and another representing the Ministry of the Treasury; (5) the general director of institutions of thrift at the latter ministry; (6) the general director of the National Institute of Insurance (*Istituto nazionale delle assicurazioni*); (7) the general director of the National Insurance against Accidents (*Cassa nazionale di assicurazione per gli infortuni*).

It is very fitting that these two last-named persons should form part of the board, with a view to rendering closer the connection between the three chief Italian institutions of thrift. This connection may be particularly useful as allowing certain departments which are appurtenant to each of these institutions to be worked in common, for instance the medical department.

The representatives of the employers and the insured persons must be nominated by those interested directly.

In every province an Institute of Social Thrift is formed for the sake of the necessary decentralization of functions and to ensure the connection between the central organization, the insured persons and the employers. These institutes are directed by committees composed of representatives of those concerned. They have to receive contributions, set on foot the procedure for the payment of pensions, promote optional insurance and voluntary thrift generally, etc. They are agencies which can also be utilized for other forms of social insurance.

A special judicial authority, like that formed for insurance against the accidents of agriculture (1), is set up for the settling of disputes, namely the Provincial Arbitrating Commissions which are of first resort, and the Central Arbitrating Commission of Appeal at Rome. On these commissions the employers and the insured persons are represented.

According to this decree, as by that concerned with the accidents of agriculture, the defence and the safeguarding of the interests of insured persons can be undertaken only by duly approved *Istituti di patronato e di assistenza* (Institutes of Employment and Assistance).

The representatives of employers and insured persons in the arbitrating commissions, in the board of directors of the *Cassa Nazionale* and in the directing committees of the provincial institutes are directly appointed by their respective organizations.

As appears from these brief remarks, the organization adopted for insurance against disablement and old age lends itself to connection with any organization which may be introduced for the other forms of social insurance, in particular insurance against sickness which has already been the subject of the investigations of a special commission appointed by a decree of 22 August 1917.

§ 7. The State's burden.

According to calculations made by the Ministry of Industry, Trade and Labour, the State's burden for the first five years for which the decree

(1) See our issue for last March, pages 121-35.

is applied, during which pensions will be awarded only on the score of disablement, will be very moderate, varying from 9 million liras in the second to 25 million liras in the fifth year. The number of pensions and the State's resultant burden will increase rapidly in the sixth year, in which old age pensions will be awarded for the first time, and will afterwards continue to grow rapidly. It may be approximately calculated that the annual charge to fall on the State in the second decade in which the measure we have considered is applied will amount to 130 million liras, in the third decade to 150 million liras, and in the fifth to 160 million liras, a figure which will subsequently be constant.

The decree as to compulsory insurance will have force from 1 January 1920.

Part III: Credit

GREAT BRITAIN AND IRELAND.

RECENT STATISTICS OF LAND PURCHASE. CREDIT IN IRELAND.

SOURCES (OFFICIAL):

REPORT OF THE IRISH LAND COMMISSIONERS for the period from 1st April 1917 to 31st March 1918. Dublin 1918.

REPORT OF THE ESTATES COMMISSIONERS for the year from 1st April 1917 to 31st March 1918. Dublin 1918.

REPORT OF THE CONGESTED DISTRICTS BOARD FOR IRELAND for the period from 1st April, 1917 to 31st March, 1918 Dublin, 1918.

In our issue of May 1919 (1) we gave statistics of land purchase credit in Ireland in the official years 1912-13 to 1916-17, together with aggregate statistics up to 31 March 1917.

We now give a series of Tables containing statistics for the year 1917-18

TABLE I. — *Sales between Landlord and Tenant in the Year ending 31 March* 1918.

	Number of loans	Number of estates	Area in acres	Rent (of tenanted land only)	Purchase price	Amount of advances	No. of years' purchase of rent (tenanted land only)
				£	£	£	
Direct Sales:							
Under the Act of 1909 (Advances by Land Commissioners)	34	7	850	152	6,214	6,209	23.9
Under the Act of 1903 (Advances by Estates Commissioners)	4,819	185	157,250	74,971	1,727,626	1,684,735	22.1
Under the Act of 1909 (Advances by Estates Commissioners)	823	96	27,760	12,184	240,297	223,895	19.5
Total Direct Sales. . . .	5,676	288	185,860	87,307	1,974,137	1,914,839	—

(1) Page 279.

and aggregate statistics up to 31 March 1918. For an explanation of the different methods under which State credit is (or has been) given in Ireland for land purchase we refer the reader to the article mentioned and to previous articles on land purchase credit (2).

The aggregate statistics both for the year 1917-18 and up to 31 March 1918 are presented in two ways. In Tables V and XI by adding the figures for estates purchased for re-sale to tenants to those for sales between landlord and tenant, we obtain the total figures for all advances made for purposes of land purchase. In Tables VI and XII we add the figures for

TABLE II. — *Estates purchased during the Year ended* 31 *March* 1918 *for Resale to Tenants.*

	Estimated number of purchasers on re-sale	Number of estates	Area in acres	Purchase price	Amount of advances
				£	£
Estates purchased by the Estates Commissioners :					
Direct from landlords under Act of 1903	334	12	10,560	107,037	106,319
Direct from landlords under Act of 1909	196	13	6,242	65,477	65,363
In Land Judge's Court under Act of 1909	35	2	1,404	10,098	10,098
By "final offer" under Act of 1909 .	19	3	528	7,015	7,015
Total estates purchased by Estates Commissioners	584	30	18,734	189,627	188,795
Estates purchased by the Congested District Board :					
Out of its own funds	—	11	2,589	25,573	25,573
Under Sec. 72 and 79 of Act of 1903. .	52	2	1,070	2,844	2,844
Under Sec. 72 and 79 of Act of 1903 and Act of 1909.	2,452	35	111,477	230,975	230,155
By "final offer" under Act of 1909 . .	2,074	17	72,951	375,499	375,499
Total estates purchased by Congested Districts Board.	1) 4,578	65	188,087	634,891	634,071
Total estates purchased	1) 5,162	95	206,821	824,518	822,866

(1) Not including estates purchased by the Congested Districts Board out of its own funds.

(2) Issues of October 1911 and June 1913

re-sales of estates purchased to those of sales between landlord and tenant and thus obtain the total figures for all holdings (and demesnes) sold to the occupiers. The difference between these two sets of figures represents the estates purchased but awaiting re-sale.

In Tables III and IX the figures relating to re-sales of holdings on estates purchased by the Congested Districts Board do not include

TABLE III. — *Re-sales during the Year ended 31 March 1918 of Estates Purchased.*

	Number of loans	Area in acres	Rent (of tenanted land only)	Purchase price	Amount of advances	Number of years' purchase of rent (tenanted land only)
			£	£	£	
Re-sales of estates purchased by the Estates Commissioners:						
Under the Act of 1903	1,161	34,072	7,557	310,966	306,448	20.3
Under the Act of 1909	49	1,978	25	30,409	30,295	21.4
Total re-sales of estates purchased by the Estates Commissioners	1 210	36,050	7,582	341 375	336,743	—
Re-sales of holdings on estates purchased by the Congested Districts Board:						
Estates re-sold under the Act of 1903 (Advances by Land Commissioners)	325	7,725	3,276	77,766	77,766	23.7
Estates re-sold under the Act of 1909 (Advances by Land Commissioners)	19	168	1	2,603	2,603	—
Estates re-sold under the Act of 1903 (Advances by Estates Commissioners)	10	522	200	5,019	5,019	25.0
Estates re-sold under the Act of 1909 (Advances by Estates Commissioners)	33	1,363	452	8,792	8,792	19.4
Total re-sales of holdings on estates purchased by the Congested Districts Board	396	9,778	3,929	94,180	94,180	—
Re-sales of demesnes on estates purchased by the Congested Districts Board and re-sold under the Act of 1903	1	191	—	1,210	1,210	—
Total re-sales	1,607	46,019	11,511	436,765	432,133	—

TABLE IV. - *Re-sales of Demesnes during the Year ended 31 March 1919.*

	Number of loans	Area in acres	Purchase price	Amount of advances
On estates in which sales have taken place between landlord and tenant under the Act of 1903 (Advances by Estates Commissioners) (1)	9	4,318	72,028	55 998
On estates purchased by the Estates Commissioners:				
Under the Act of 1903 (2)	2	385	6,735	6,735
Under the Act of 1909 (2)	2	169	5,320	5,206
On estates purchased by the Congested Districts board and re-sold under the Act of 1903		191	1,210	1,210
Total re-sales of demesnes.	14	5,363	85,293	69,149

(1) Included in figures given in Table I for Direct sales under the Act of 1903 (Advances by Estates Commissioners).— (2) Included in figures given in Table III for Re-sales of estates purchased by the Estates Commissioners

TABLE V. — *Advances made during the Year ended 31 March 1919 for purposes of Land Purchase.*

	Number of loans (1)	Number of estates	Area in acres	Purchase price	Amount of advances
				£	£
Sales between landlord and tenant	5,676	288	175,860	1,974,137	1,914,829
Estates purchased for re-sale to tenants	2 5,162	95	206,821	824,518	822,866
All advances made for purposes of land purchase	2 10,839	383	382 681	2,798,655	2,737,695

(1) In the case of estates purchased, the number of loans is the estimated number of purchasers to whom advances will be made on re-sale. — (2) Not including estates purchased by the Congested Districts Board out of its own funds

TABLE VI. — *Holdings and Demesnes sold to the occupiers during the Year ended 31 March 1919.*

	Number of loans	Area in acres	Rent (of tenanted land only)	Purchase price	Amount of advances
			£	£	£
Sales between landlord and tenant	5,676	288	175,860	1,974,137	1,914,829
Re-sales of estates purchased	1,607	46,019	11,511	436,765	432,133
All holdings (and demesnes) sold to the occupier	7,283	46,307	187,371	2,410,902	2,346,962

TABLE VII. — *Sales between Landlord and Tenant up to 31 March 1918.*

	Number of loans	Number of estates	Area in acres	Rent (of tenanted land only)	Purchase price	Amount of advances	Number of years' purchase of rent
				£	$	£	£
Direct Sales							
Under the Irish Church Act, 1869	6,057	—	—	—	—	1,674,811	
Under the Act of 1870.	877	—	52,906	—	859,522	514,536	—
Under the Act of 1881	326	—	19,397	15,090	292,470	195 033	19 4
Under the Act of 1885	23,338	1,254	880,917	61,197	9,625,763	9,461,259	17 0
Under the Acts of 1891 and 1896	37,829	2,007	1 243,911	650,811	11,576,605	11,395,674	17 7
Under the Act of 1903 (Land Commission)	365	59	11 601	4,225	97,039	97,585	23.1
Under the Act of 1909 (Land Commission)	81	19	3,717	856	18,669	18,664	21 5
Under the Act of 1903 (Estates Commissioners)	153,563	6 122	5,025,727	2,463,981	56 693,783	56,052,298	22 4
Under the Act of 1909 (Estates Commissioners)	14,125	1,711	171,861	209,007	4,302,185	4,185,956	20 1
Total Direct Sales	236,601 (1)	11,202 (2)	7,713,103 (3)	3,905,170	( ) 83,167,326	83,596,046	—
Sales in the Land Judges Court							
Under Sec 40 of Act of 1986	4,574	215	125,699	6,035	1,171,676	1 107 179	17 7
Under Sec 40 of Act of 1896 and Act of 1903.	582	51	19,738	8 829	174,042	170 625	19 7
Under Sec 40 of Act of 1896 and Act of 1909.	89	6	1,201	562	10 815	10,756	19,2
Under Act of 1903 (Direct Sales).	2,991	189	80,030	33,764	684,816	676,678	20 3
Under Act of 1909 (Direct Sales).	370	49	10 476	4,590	92,340	92 115	20.1
Total Sales in Land Judges Court	8,606	510	237,155	113,800	2,133,689	2,057,553	—
Redemption of Rent							
Under the Acts of 1891 to 1896	98	59	6,456	7,365	110,129	98,394	14 4
Under the Act of 1903.	10	9	431	521	9,365	9,365	17 9
Under the Act of 1909	2	2	175	204	4,600	4,600	22 5
Total Redemption of Rent	110	70	7,065	8,090	124,094	112,359	—
Total Sales between Landlord and Tenant.	245,317 (1)	11,782 (2)	7,957,323 (3)	4,027,060	( ) 85,725 109	85,765 958	—

(1) Not including sales under the Acts of 1860, 1870 and 1881 — ( ) Not including sales under the Act of 1869 — (3) Not including sales under the Acts of 1869 and 1870

TABLE VIII. — *Estates purchased (up to 31 March 1918 for Re-sale to Tenants.*

	Estimated number of purchasers on re-sale	Number of estates	Area in acres	Purchase price	Amount of advances
				£	£
Estates purchased by the Land Commissioners:					
Under the Act of 1881	405	7	11,260	63,124	45,768
Under the Act of 1885	2,029	101	61,678	537,071	531,277
Under the Acts of 1891 to 1896	1,758	99	50,419	456,539	447,523
Total estates purchased by the Land Commissioners	4,192	207	123,357	1,056,734	1,024,568
Estates purchased by the Estates Commissioners:					
Direct from landlords under Act of 1903	23,002	638	758,759	6,524,594	6,477,540
Direct from landlords under Act of 1909	1,531	153	51,382	544,859	538,873
In Land Judge's Court under Act of 1903	5,807	155	177,929	1,607,087	1,584,544
In Land Judge's Court under Act of 1909	250	17	9,738	112,166	109,389
By "final offer" or compulsory purchase under Act of 1909	82	11	2,671	38,600	38,600
Under Evicted Tenants Acts and Act of 1903	629	93	26,505	318,640	318,640
Under Evicted Tenants Acts and Act of 1909	173	33		89,495	89,495
Total estates purchased by Estates Commissioners	31,474	1,100	1,026,984	9,235,741	9,157,081
Estates purchased by the Congested Districts Board:					
Out of its own funds	—	84	24,756	149,109	149,109
Under the Act of 1896	6,300	58	166,000	502,797	502,797
Under Sec. 77 of Act of 1903	1,514	33	54,519	274,926	274,926
Under Sec. 77 of Act of 1903 and Act of 1909	655	19	18,039	90,891	90,891
Under Sec. 72 and 79 of Act of 1903	13,871	247	468,479	2,630,770	2,628,349
Under Sec. 72 and 79 of Act of 193 and Act of 1909	12,708	239	478,367	1,851,945	1,850,852
By "final offer" and compulsory purchase under Act of 1909	9,754	102	351,133	1,602,693	1,602,693
Total estates purchased by Congested Districts Board	(1) 44,802	782	1,561,293	7,103,131	7,099,617
Total estates purchased	(1) 80,468	2,089	2,711,634	17,395,606	17,281,266

TABLE IX *Re-sales (up to 31 March 1918) of Estates purchased*

	Number of loans	Area in acres	Rent (of tenanted land only)	Purchase price	Amount of advance	Number of years' purchase of rent (tenanted land only)
Re-sales of estates purchased by the Land Commissioners						
Under the Act of 1881	405	11,260	—	63,121	45,768	—
Under the Act of 1885	2,029	61,678	33,463	537,071	531,277	17·0
Under the Acts of 1891 to 1896	1,758	50,119	25,528	456,539	417,523	15·9
Total re-sales of estates purchased by the Land Commissioners	4,192	123,357	(1) 59,011	1,056,734	1,021,568	—
Re-sales of estates purchased by the Estates Commissioners						
Under the Act of 1903	20,181	671,737	190,166	6,741,647	6,156,052	21·3
Under the Act of 1909	699	17,784	2,363	205,628	201,585	20·1
Total re-sales of estates purchased by the Estates Commissioners	20,880	689,521	192,529	6,747,275	6,657,637	—
Re-sale of holdings on estates purchased by the Congested Districts Board						
Estates re-sold under the Acts of 1891 to 1896:						
(*a*) Estates purchased out the Board's own funds	96	1,512	—	10,479	10,479	—
(*b*) Estates purchased by means advances	2,675	62,685	12,832	196,316	196,316	15·5
Estates re-sold under the Act of 1903 (Advances by Land Commissioners)	9,199	202,856	6,093	1,398,342	1,392,252	—
Estates re-sold under the Act of 1909 (Advances by Land Commissioners)	19	168	1	2,603	2,603	—
Estates re-sold under the Act of 1903 (Advances by Estates Commissioners)	56	1,066	622	15,990	15,990	25·7
Estates re-sold under the Act of 1909 (Advances by Estates Commissioners)	11	1,363	172	8,792	8,792	19·1
Total re-sales of holdings on estates purchased by the Congested Districts Board	12,358	269,652	(2) 77,600	1,632,522	1,626,432	—
Re-sales of demesnes on estates purchased by the Congested Districts Board						
On estates re-sold under the Act of 1903	15	2,800	—	30,869	36,793	—
On estates re-sold under the Act of 1909	10	3,405	—	35,721	35,212	—
Total re-sales of demesnes on estates purchased by the Congested Districts Board	25	6,205	—	75,590	72,005	—
Total re-sales	37,455	1,088,735	(3) 329,140	9,512,121	9,380,642	—

(1) Not including re sales of estates purchased under the Act of 1881 ( ) Not including re sales under the Acts of 1891 to 1896 of estates purchased by the Congested Districts Board out of its own funds (2) Not including re sales of estates purchased under the Act of 1881 nor re sales under the Acts of 1891 to 1896 of estates purchased by the Congested Districts Board out of its own funds

resales in which the purchaser paid the full amount of the purchase-money and no advance was made. This imperfection recurs in the total figures for re-sales in the same tables and in Tables VI and XII as well as in the total "all holdings and demesnes sold to the occupiers" in the two last mentioned tables. It does not, however, affect the figures for the amount of advances made, nor does it really affect the other figures for re-sale, as the few plots purchased for cash were not agricultural land, but were purchased for glebe residences, teachers' residences, sites for schools or churches, and such public purposes.

TABLE X. — *Re-sales of Demesnes up to 31 March 1918.*

	Number of loans	Area in acres	Purchase price	Amount of advances
			£	£
On estates in which sales have taken place between landlord and tenant:				
Under the Act of 1903 (1)	207	80,269	1,334,109	1,137,018
Under the Act of 1909 (1)	14	3,130	43,406	41,647
Total re-sales of demesnes on estates in which sales have taken place between landlord and tenant (1)	221	83,399	1,377,575	1,179,265
On estates purchased by the Estates Commissioners:				
Under the Act of 1903 (2)	95	28,326	376,949	361,090
Under the Act of 1909 (2)	12	2,786	38,411	35,116
Total re-sales of demesnes on estates purchased by the Estates Commissioners (2)	107	31,112	415,360	396,206
On estates purchased by the Congested Districts Board:				
Re-sold under the Act of 1903	15	2,800	39,869	39,793
Re-sold under the Act of 1909	10	3,405	35,721	35,512
Total re-sales of demesnes on estates purchased by the Congested Districts Board	25	6,205	75,590	75,305
Total re-sales of demesnes	353	120,716	1,868,525	1,650,776

(1) Included in figures given in Table VII for Direct Sales under the Acts of 1903 and 1909 (Advances by Estates Commissioners)

(2) Included in figures given in Table IX for Re-sales of Estates purchased by the Estates Commissioners.

TABLE XI. — *Aggregate Statistics up to 31 March 1917 of Advances made for purposes of Land Purchase.*

	Number of loans (1)	Number of estates	Area in acres	Purchase price	Amount of advances
Sales between landlord and tenant. .	245,317	(2) 11,782	(3) 7,957,323	(3) 85,725,109	85,765,958
Estates purchased for re-sale to tenants.	(4) 80,468	2,089	2,711,634	17,395,606	17,281,266
All advances made for purposes of land purchase , ...	(4) 325,765	(2) 13 871	(3) 10,668,957 [2]	103,120,715	103,047,224

(1) See note (1) to Table V. — (2) Not including sales under the Acts of 1869, 1870 and 1881 — (3) Not including sales under the Act of 1869 — (4) Not including the purchase of land by the Congested Districts Board out of its own funds

TABLE XII. — *Aggregate Statistics up to 31 March 1917 of all holdings (and demesnes) sold to the occupiers under the Land Purchase Acts.*

	Number of loans	Area in acres	Rent (of tenanted land only)	Purchase price	Amount of advances
Sales between landlord and tenant. .	245,317 (1)	7,957,323 (2)	4,027,060 (2)	85,725,109	85,765,958
Re sales of estates purchased	37,455	1,088,735 (3)	329,140	9,512,121	9,380,642
All holdings (and demesnes) sold to the occupiers.	282,772 (1)	9,046,058 (4)	4,356,200 (2)	95,237,230	95,146,600

(1) Not including sales under the Act of 1869. — (2) Not including sales under the Acts of 1869 and 1870. — (3) Not including re-sales of estates purchased under the Act of 1881 nor re-sales under the Acts of 1891 to 1896 of estates purchased by the Congested Districts Board out of its own funds. — (4) Not including sales under the Acts of 1869 and 1870, nor re-sales of estates purchased under the Act of 1881, nor re sales under the Acts of 1891 to 1896 of estates purchased by the Congested Districts Board out of its own funds.

ITALY.

THE AGRICULTURAL CREDIT DEPARTMENT OF THE BANK OF SICILY IN 1918.

SOURCES:

CONSIGLIO GENERALE DEL BANCO DI SICILIA. SESSIONE ORDINARIA DEL 1919. RENDICONTO E BILANCIO CONSUNTIVO SUL SERVIZIO DEL CREDITO AGRARIO (*General Council of the Bank of Sicily Ordinary Meeting of* 1919 *Summarized Report and Financial Statement on the Agricultural Credit Department*). Year 1918. Palermo, 1919.

The affording of agricultural credit is entrusted in Sicily to a special credit department of the Bank of Sicily which, like the savings-bank of the Bank of Naples in the case of the southern provinces of the kingdom and of Sardinia, generally exercices this function through the medium of local institutions, mostly co-operative in form, and known as intermediary societies (*enti intermediari*). In speaking of the results obtained by the agricultural credit department of the Bank of Sicily in 1918 we consider it fitting to dwell especially on the development of these societies, since the efficient working of the department largely depends on them.

§ 1. THE DEVELOPMENT OF THE INTERMEDIARY SOCIETIES.

On 31 December 1918 the intermediary societies or local institutions for the distribution of agricultural credit numbered 309. 289 of them were in form co-operative societies; 253 were nominally collective; 34 were joint-stock societies and two were partnerships; and 20 had been constituted as *enti morali* (corporations having a non-commercial aim).

If we consider these bodies, allowed to afford agricultural credit, according to their kind, we find them distributed as follows:

Agricultural societies of labour and production		125
Agricultural banks	Societies	80
	Enti morali	8
Rural banks		46
Agricultural consortia		16
Agricultural banks		13
Monti frumentari		11
Agricultural associations		7
Popular banks		3
Total		309

In 1918 the number of the societies holding *collective leases* diminished from 37 to 31 and the area thus held was reduced from 28,381,58.66 hectares to 23,835,36.03 hectares. The following table gives, by provinces, the data as to the leases current on the 31st of last December.

TABLE I. — *Societies holding collective leases.*

Provinces	No of societies	No. of farms	hectares
Palermo	5	8	1,738,95.31
Catania	4	4	2,098,96.23
Girgenti	6	13	4,420,30.59
Trapani	9	50	11,444,01.57
Caltanissetta	7	9	4,133,12.33
Total	31	85	23,435,36.03

The membership of the 309 intermediary societies reached 44,712 ; the capital and reserve fund of the members, who had unlimited liability, amounted to 207,988,707 liras; and the capital and reserve individually held by the intermediary societies to 4,395,110 liras. The increase of the deposits these latter received was notable: from 15,283,341 liras on 31 December 1917 they rose to 24,143,307 liras on 31 December 1918, while securities increased comparatively only a little, being 9,148,426 liras at the former and 9,956,567 liras at the latter date.

The total credits which the department opened for the intermediary societies amounted in 1918 to 15,617,000 liras, distributed as follows among the groups of these societies in the various provinces: Girgenti, 62 societies, 2,828,000 liras; Palermo, 53 societies, 2,860,000 liras; Trapani, 47 societies. 2,527,000 liras; Caltanissetta, 40 societies, 1,889,000 liras; Syracuse, 29 societies, 1,731,000 liras; Messina, 28 societies 1,041,000 liras; Catania, 26 societies, 1,181,000 liras; Caltagirone, 24 societies, 1,560,000 liras.

The amount of these credits was made up as follows: 12,117,500 liras of ordinary credits, 770,000 liras of temporary credits, 263,000 liras of credits of which the societies could avail themselves if they gave certain fixed guarantees, and 2,466,500 liras of suspended credits, that is of credits which it was deemed wise not to render available immediately. This total amount was nearly equal to one fourteenth of the total guarantees which the societies offered in their capital and reserve funds and the capital and reserve funds for which the memers had unlimited liability.

During the year the number of communes having intermediary societies fell from 188 to 184, and the number unprovided with a local agency for the distribution of agricultural credit rose proportionately from 169 to 173. Among the 184 communes so provided out of the total number of 357, there were distributed on the 31st of last Decemher 309 societies allowed to afford agricultural credit. 110 communes had one society each, 47 had two societies each, 17 had three, 6 had four, one had five, one had six, one had seven and one twelve.

In order to ensure the good working of the intermediary bodies 33 inspections were made in 1918. They yielded fully satisfactory results in 15 cases, partially favourable results in 10 cases, unfavourable results in 8 cases. Owing to difficulties connected with the staff, propaganda work was restricted, but the near future, with the country's return to normal conditions and with the need for a wider and more intense effort to secure production, will open up a new and large field for propaganda.

§ 2. The business done in 1918.

During 1918 the agricultural credit department of the Bank of Sicily completed 1204 operations for 515,811 liras with funds derived as to three tenths from the deposits received by the Bank's own savings-bank, and 10,833 operations for 7,216,707 liras with the funds of the provincial agricultural banks it manages, that is a total of 12,037 operations for 7,732,518 liras.

The operations of this year show, as compared with those of the previous year, a fall of 3,738 in the number of bills discounted and an increase of 428,885 liras in the total sum of operations.

Of the 12,037 bills for 7,732,518 liras, discounted as aforesaid by the department, 11,870 for 6,419,269 liras depended on operations concluded with the help or by the medium of the intermediary institutions. Of them 11,728 for 4,371,030 liras were given by farmers to the intermediary societies and ceded by the latter to the department, while 242, for 2,048,239 liras were directly discounted by the intermediary societies.

The sums granted to individuals, only in the form of discounts of bills, numbered 167 and amounted to 1,313,248 liras. In 1918 discounts to individuals were predominantly represented by grants to large farms which could not have been financed by the intermediary societies. Where intermediary societies did not exist small and medium-sized farms were also assisted, in order that the necessary help might be ensured to farmers.

The discounts made in 1918 are distributed as follows in accordance with their objects: (1) for seeds, manures, fertilizers, tillage and harvesting, 11,791 discounts for 5,469,189 liras; (2) for machinery, implements and live and other stock, 104 discounts for 215,088 liras, (3) for direct discounts to intermediary societies, 142 discounts for 2,048,328 liras. The discounts of the third group were, as regards their larger sum (1,577,813 liras), for collective purchasing.

The total discounts of 1918 were distributed among classes of borrowers as shown in Table II, and were for the benefit of different kinds of crops as shown in Table III.

During 1918 the rate of the interest exacted by the department on all its business, whether on its own account or on that of the provincial agricultural credit banks, remained 4 ¼ per cent., since the rates of the interest paid by the Bank's savings-bank to depositors and by the agricultural credit department to the savings-bank remained at 3 and 3 ¼ per cent., respectively.

TABLE II. — *Classification of operations by classes of consumers.*

Provinces	Landowners		Tenants by emphyteusis		Métayers		Rent paying tenants		Total	
	Number of bills	Amount	Number of bills	Amount	Number of bills	Amount	Number of bills	Amount	Number of bills	Amount
		liras		liras		liras		liras		liras
Palermo	2,246	862,328.53	47	21,334.—	71	19,511.95	445	263,997.19	2,809	1,167,171.67
Messina	377	201,124.62	—	—	21	10,115.—	39	17,338.25	440	22,577.87
Catania	182	214,537.85	1	400.—	30	15,980.—	109	211,417.22	322	442,335.07
Girgenti	683	397,178.62	—	—	302	76,629.25	908	636,888.80	1,893	1,110,696.67
Trapani	254	138,575.02	34	20,835.—	14	5,365.—	1,232	369,249.49	1,534	534,024.51
Syracuse	121	314,175.31	391	102,960.30	89	20,016.50	705	177,405.25	1,609	614,557.36
Caltanisetta	559	273,223.99	30	10,411.79	142	26,727.40	876	334,467.98	1,613	644,861.07
Caltagirone	870	525,100.65	5	565.—	106	39,116.—	694	377,272.89	1,675	942,054.54
Total . . .	5,595	2,926,244.59	514	156,536.—	778	213,461.10	5,008	2,388,037.07	11,895	5,684,278.76 (1)

(1) For various objects 142 bills for 2,048,239.72 liras were also directly discounted to the intermediary societies.

TABLE III — *Classification of operations according to the crops they benefited*

Provinces	Sown crops		Vines		Oranges and lemons		Olives		Various crops		Totals	
	Number of bills	Amount	Number of bills	Amount	Number of bills	Amount	Number of bills	Amount	Number of bills	Amount	Number of bills	Amount
		liras		liras		liras		liras		liras		liras
Palermo	291	257,416 10	873	261,513,15	1,285	503,858 78	139	42 652 35	221	101,701.20	2,809	1,167,171 67
Messina	52	61,823 50	129	56,279.62	131	72,326 35	36	8,601 70	62	29,513 10	140	228 577 87
Catania	27	16 ,250 —	53	28,341 10	2	1,000 —	—	—	240	232,713 97	322	412,335 07
Girgenti	718	167,917,50	191	103,086 48	16	10,313,60	2	900.—	960	528,449.09	1 803	1,110,696 67
Trapani	711	321,513.57	194	91,597 —	—	—	2	1,300 —	597	119,583 64	1,534	533,02 1 51
Syracuse	212	161,822.01	1,018	230,418.05	111	128,405.—	2	250.—	206	93,632 30	1,609	614,557 36
Caltanissetta	1,148	165 101 62	165	40,844 65	—	—	—	—	300	137,01 1 8	1,613	611,861 07
Caltagirone	1,271	669,969 50	224	74,397 20	48	27,325.—	—	—	129	170,363 84	1,675	942,051 54
Totals.	4,523	2,585,774 40	2,817	886,537 25	1,623	743,226 73	181	53,707 05	2,721	1,415,031 33	10,895	5,684 278 76 (1)

(1) Direct discounts of 142 bills for tor 2,048,239 72 liras were also made directly to the societies for various objects

Part IV: Agricultural Economy in General

ARGENTINE REPUBLIC.

PRESENT AGRICULTURAL CONDITIONS IN ARGENTINA AS AFFECTING LAND SETTLEMENT.

SOURCES:

LAHITTE (Emilio): Problemas Agrarios (*Agricultural Problems*) in *Revista de Ciencias Económicas* Nos. 67, 68 and 69. Buenos Aires, January, February and March 1919.

The economic consequences of the war have induced economists and students of agricultural matters to examine the present agricultural position of Argentina and seek to discover the problems to be solved before production can be intensified and the productive area enlarged.

Dr. Lahitte, director of the Office of Rural Economy and Statistics, to whose work we have alluded on other occasions, has published on this subject a complete study, by means of which we can examine present agricultural conditions in the Republic, bringing their peculiar characteristics into relief, with special regard to the important problem of land settlement.

§ 1. DISTRIBUTION OF LAND.

It will not be out of place to make a preliminary reference to the present distribution of landed property in the Argentine. A first distinction is related to the various ownership of the property, whether State, public or private ownership. This distinction can, according to the figures reproduced by Dr. Lahitte, be briefly shown as follows :

	Hectares
Land belonging to the Treasury	83,492,104
» » » » provinces and roads, rivers etc.	2,500,000
Total. . . .	85,992,104
Land in private ownership	209,263,792
Grand total. . . .	295,255,896

As appears from these figures, about 70 per cent. of all Argentine land is now in private ownership.

As regards the lands of the Treasury, we notice that they are distributed in the various provinces as follows :

	Hectares
Formosa	7,888,552
Chaco	7,844,386
Misiones	2,271,613
Pampas	1,490,036
Rio Negro	14,123,121
Neuquen	5,667,814
Chúbut	18,279,229
Santa Cruz	19,637,776
Tierra del Fuego	1,541,977
Los Andes	5,696,600
Isla de los Estados	51,000

From these figures it appears that most of the Treasury lands are situated in the southern provinces, in Rio Negro, Chúbut, Santa Cruz, provinces which have hitherto been less cultivated than the others.

Having made this general distinction, we will proceed to examine the special agricultural conditions of the country.

§ 2. Agricultural conditions of the Argentine country.

We must first notice that of the vast territory of the Argentine, comprising 2,987,353 square kilometres, only 6 per cent. has been brought under cultivation, and owing to the small home consumption 65 per cent. of the annual yield is exported. Nevertheless in 1915 out of the total value exported, namely 588,000,000 pesos (gold), 507,000,000 pesos (gold) or 86 per cent. represented goods produced rurally. This proves the great potential productivity of the Argentine soil, which may, taken altogether, be said to be fitted to any kind of crop.

We will now examine this vast territory in detail, following Dr. Lahitte's division of it into four great districts. We will take for basis not only the yield of each district but also, and above all, the totality of the natural and economic conditions which specially characterize it.

The First District is, according to the division already mentioned, made up as follows :

Table I. — *First District.*

Province	Area in hectares	Cultivated area in hectares	Population	Percentage of total area which is cultivated
Buenos Ayres	30,512,000	8,822,820	2,321,543	29
Santa Fé	13,138,200	4,277,910	1,010,835	33
Córdoba	17,334,900	5,168,550	818,599	
Entre Rios	7,575,400	1,021,700	451,278	13
Pampas	14,590,700	1,924,000	134,020	13
Total	83,151,300	21,214,980	4,736,275	26

Of the 83, 151,300 hectares in this district 1,490,036 hectares in Central Pampas belong to the Treasury, and other 150,000 hectares being occupied by roads, rivers and towns, there remain about 81,500,000 hectares which are private property. Of these last at least 75,000,000 hectares can be cultivated almost entirely, without occasioning special works of irrigation, deforestation or manuring, for they are most fertile and excellently situated and the farmer can well obtain a yield from them in their present natural state.

Since of the total 81,500,000 hectares in private ownership only some 21,000,000 hectares are cultivated, there are at least 50,000,000 hectares of which the value would be realized if the principal obstacle to this no longer existed namely the scarcity of the population which is, as appears in the preceding table, one of only 4,736,000. This district, which yields cereals, flax and alfalfa almost exclusively, is perhaps the richest in Argentina.

As the succeeding figures show, about 19,000,000 hectares were brought under cultivation and planted in cereals in 1916, that is about 93 per cent of the whole area under such crops.

Wheat	6,331,000 hectares
Flax	1,378,000 »
Maize	3,339,570 »
Oats	992,000 »
Barley	137,300
Alfalfa	6,840,000 »
Total	18,917,870 »

As regards stock raising, there are in this district 18,000,000 heads of cattle, representing 77 per cent. of the total herds, and 18,000,000 sheep representing 43 per cent. of the flocks of the whole country.

In this district all conditions favourable to the stability and prosperity of a settler are united, but, as we have already said, its lands are for the most part in private ownership, and in order to divide them into small holdings expropriation or necessary provisions for letting would be required.

In this district a settler's family can work a farm of 200 hectares with the same fixed capital as would be needed for one of 50 hectares, for there is no need to increase wages so as to diminish the proportional net profits. This peculiar agricultural condition makes the system of leasing economically suitable, and 65 per cent. of the mixed farms are held on lease. Leases are generally short, for the additional reason that owners consider that it is not to their interest to grant them for more than two or three years, first because they cannot know beforehand whether a settler will be a good or a bad tenant, and secondly because agricultural conditions are so changeable as to give no security for the utilization of the land according to a special agricultural method for a long period of time. The prevailing

system of letting is the *aparceria*, and therefore almost all the lessees pay to the owners a certain percentage of their harvests proportionate to the quality of the land and its distance from railway-stations and ports. It is necessary however to take the necessary measures in order that the terms of leases may be fulfilled both by owners and by tenants. By encouraging the system of leasing and giving it fuller legal sanctions, this district could be more intensively settled for the growing of cereals, without expropriating the landowners. The possibility of acquiring land now in private ownership, with a view to intensifying settlement, need not at the same time be excluded. Among other proposals to this end is that of forming a State Agricultural Bank which would buy land by issuing debentures (or conduct operations with the existing Mortgage Bank by means of the *cedulas* issued by the latter), and systematically settle this land. The owner would be encouraged to sell part of his property by the fact that this transaction of the Agricultural Bank would increase the value of his lands adjacent to those sold.

We will now examine whether, in view of the special conditions of these lands, it would or would not be possible, or advisable from an economic and financial point of view, to establish small holdings in this district. Of its area of 83,151,300 hectares only 21,218,000 hectares are, as we have said, cultivated, and of this cultivated area 8,000,000 hectares are planted with alfalfa and other forage crops exclusively intended for cattle, so that only 13,215,000 hectares are given up to agriculture unconnected with stock farming. Further, the large areas in the Pampas and in the provinces of Córdoba and Santa Fé which are devoted to stock farming are not those which could suitably be divided into small rural holdings, and those which are already under cultivation and are near the great urban centres have reached such a value that they have become very difficult for settlers to acquire. According to calculations made on this point a small farm of 25 hectares, situated from 100 to 200 kilometres away from the large centres of population, would cost 20,179 pesos (gold). And there would not be, according to the conclusions of Dr. Lahitte which he supports with many figures, compensation for this high price of the land in the value of the crops it might bear, owing to the lack of a real export trade.

It must therefore be concluded that the constitution of small holdings is not an important matter in this first district, in which all the factors of production are suited to comparatively extensive farming.

Second District. — The following table shows that the second district has a total area of 51,306,000 hectares or more and a cultivated area of 1,133,550 hectares.

In this district stock farming of all kinds now occupies, since the extensive system of production prevails, about 9,000,000 hectares, which taken together with the cultivated area give a total of 10,135,550 hectares. More than 40,000,000 hectares are therefore unused, a fact which is not remarkable since this district comprises, as is known, the most mountainous part of the country, and a considerable part of it may be taken to be unexplored.

TABLE II. — *Second District.*

Province	Area in hectares	Cultivated area in hectares	Population	Percentage of area which is cultivated
Mendoza . . .	14,637,800	288,440	319,525	2
San Juan . . .	9,809,600	137,700	124,314	1
San Luis . . .	7,521,900	558,050	121,438	7
La Rioja .	9,803,000	75,460	81,034	1
Catamarca .	9,533 700	73,900	101,599	1
Total . . .	51,306,000	1,133,550	747,919	2

The quality of the land, and the irrigation which extends over more than half a million hectares, make this district one of those most suited to fruit growing generally, and expecially to viticulture to which an area of 99,750 hectares is given up, including 70,000 hectares in the single province of Mendoza and 22,000 in that of San Juan.

The industries connected with agriculture would also have a large development if they were not checked by the narrow limits of home consumption and the great distance of this district from foreign markets.

According to Dr. Lahitte the problem of land settlement cannot be solved without the leadership and guardianship of a national institution formed for such purpose.

Third District. — This region, made up as the following table shows of the provinces of Corrientes, Santiago del Estero, Catamarca, Tucumán, Salta and Jujuy and of the national territoires of Misiones, Formoso, Chaco and the Andes, comprises 78,455,900 hectares of which 903,387 hectares have been brought under cultivation. Besides its great wealth of forests, which cover some 700,000 square kilometres and represent one of its chief sources of profit, we should notice its intensive cultivation of sugar-cane, the sugar-cane plantations extending in the provinces of Tucuman, Juju and Salta over an area of 85,000 hectares and giving an annual yield of 200,000 tons of sugar. Chaco is noted for its rich production of quebracho, castor-oil, arachis, tobacco, coffee and cotton, which constitute the primary bases of its export trade. Cotton-growing has especially developed in this territory. At the beginning of the war, that is in 1914, it was practised, according to the data given by our authority, only on 3,000 hectares, but today, owing to the great demand of commercial houses, it is carried on over more than 10,000 hectares. We will not stay to enumerate the various and abundant crops of each province but will merely state that the wealth of this district is incalculable.

Its territorial position is as follows :

TABLE III. — *Third District.*

Province	Area in hectares	Cultivated area in hectares	Population	Percentage of area which is cultivated
Corrientes	8,687,900	281,857	361,076	3
Tucumán	2,700,009	126,150	351,638	5
Santiago del Estero	14,348,400	208,200	279,233	1
Salta	12,513,400	139,500	143,757	1
Jujuy	3,384,700	68,820	80,983	0.2
Misiones	2,982,200	29,200	53,625	1
Chaco	13,663,500	32,300	66,635	0.2
Formosa	10,725,800	17,580	25,499	0 2
Andes	9,000,000	180	2,562	0.002
Total	78,455,900	903,387	1,368,410	1

Of the 27,371,500 hectares constituting the area of the lands of Chaco, Formosa and Misiones, 17,004,551 hectares belong to the State and are partly occupied by rich and vast forests and partly given up to stock-raising and agriculture According to Dr. Lahitte the private lands are similarly utilized.

Stock raising and forestry, which offer in this district a vast field for activity, are not favourable to the formation of agricultural settlements. As much can be said of tobacco-growing, which would give a large yield but asks for special aptitudes and methods as regards both organization and industrial cultivation, and of the growing of the other crops proper to this district. Only cotton is not subject to these difficulties, on account of the nature of the crop and of the great place it always commands on the world's market. It might therefore be said that in respect to cotton growing, with a view to the exporting of the primary material or the production of cotton articles of Argentine manufacture, some of the Treasury lands of this district, and especially those in Chaco, might be important factors for the solution after the war of the problem of land settlement

Fourth District. — This district, which comprises, as the following table shows, the lands of Neuquen, Rio Negro, Chúbut and Santa Cruz and the eastern part of Tierra del Fuego, covers 85,853,800 hectares of which 58,249,917 hectares, or 70 per cent. of the total area, belong to the State. and 26,553,887 hectares, or 30 per cent., are in private ownership.

The principal crops of this district are alfalfa, maize, wheat, oats and fruit. They thrive expecially in the lands of Rio Negro, which have been opened up to agricultural activity only for a short while by irrigation and railways, the two great factors for the transformation of desolate tracts into the most fertile agricultural country.

TABLE IV. — *Fourth District.*

Province	Area in hectares	Cultivated area in hectares	Population	Percentage of area which is cultivated
Neuquen	10,500,000	29,760	31,824	0.3
Rio Negro	20,675,000	75,400	51,113	0 4
Chúbut	24,203,900	19,780	37,202	0.08
Santa Cruz.	28,275,000	2,150	14,326	0.006
Tierra del Fuego	2,149,900	400	3,312	0.02
Total . . .	85,803,800	127,490	137,777	0.1

Stock-raising has also had a certain development in this district where 433,000 head of cattle and 11,000,000 sheep are found.

Dr. Lahitte calls this district that of the future, because it comprises lands suited to stock farming, beautiful cultivable valleys and ports on the Atlantic, all assets which now yield little but of which the value might well be realized.

The Ministry of Lands and Colonies has in hand investigations for ascertaining the value of the yield of these lands, and for this purpose inspections are made in order to discover the capacity of the land as regards stock and arable farming, the cost of production in relation to distance, the cost of labour and of means of transport, etc. The necessity for this preliminary investigation by the competent ministry shows how hazardous would be any forecasts as to the development of any special forms of production in this district and as to its future value as an agricultural asset, regarded from the point of view of land settlement or otherwise.

§ 3 CONCLUSION.

According, then, to Dr. Lahitte, the problem of land settlement today presents graver difficulties than ever, and serious measures are necessary for overcoming them. Especially urgent is the organization of a wide system of credit applied to agrarian economy. In this connection it has been proposed to modify the rules of the National Mortgage Bank so as to allow it to make loans on rural holdings of 200 hectares on such terms that the acquisition of land by settlers will be stimulated by a liberal system of payments by instalments. Dr. Lahitte strongly supports the formation of an Agricultural Bank, a project to which we alluded in speaking of the grain-growing district. This bank would not only buy and settle land now in private ownership, but would also undertake the settlement of State land, and would develop all those credit operations which are connected with land settlement. It would also promote certain fixed rural industries

as practically and effectively as possible, and encourage and direct rural co-operation in all its forms, thus opening up the road which indubitably leads to the more intensive production and the better distribution of products.

Having thus examined the land problem in relation to settlement in the Argentine, Dr. Lahitte also alludes to the problem of immigration. He notes that an appreciable immigratory movement into the Republic ought now to take place, and that it ought to be subjected to special rules, receiving definite direction from the Argentine State For while in the past the immigration could be suffered of undistinguished masses, regardless of sex, age and qualifications, because the supply of labour was defective not only in agriculture but also in other industries, so that a considerable number even of unselected agriculturists and labourers could easily find work, this would not today be possible on account of the changed conditions of agricultural and industrial economy.

The immigrants to be preferred for the Argentine would be those having a moderate capital or those having large available capital to invest. The latter would, according to Dr. Lahitte, best suit the new needs and all the conditions which have to be fulfilled in order that the problem of land settlement may be substantially and effectively solved.

While the first district, called the grain-growing district, is that which owing to the quality of its soil most attracts immigration, it is at present that which least lends itself to colonization by immigrant settlers, because its privately owned lands are either farmed by the owners directly or are to let or to be sold at high prices only, while the Treasury lands are not suitable to individual colonizing enterprise on account of distance from populated centres or lack of labour or irrigation or for other reasons. The current of immigration should therefore preferably be turned towards the lands of other districts. But the value of these lands cannot, owing to the conditions we have noted, be realized except by colonizing enterprise fortified by large capital or at least able to procure such capital on the spot.

The Agricultural Bank, of which Dr. Lahitte is so ardent a supporter, would supply this need also.

UNITED STATES.

THE RECLAMATION OF UNCULTIVATED LANDS FOR SETTLEMENT BY RETURNED SOLDIERS.

SOURCES (OFFICIAL):

LETTER BY THE SECRETARY OF THE INTERIOR, THE HON. FRANKLIN K. LANE, TO THE PRESIDENT, dated 31 May 1918 (Printed in the *Reclamation Record* of July 1918).

ANNUAL REPORT OF THE DEPARTMENT OF THE INTERIOR FOR THE FISCAL YEAR ENDED JUNE 30, 1918. Washington, 1918.

A BILL MAKING AN APPROPRIATION FOR THE RECLAMATION OF SWAMP LANDS (H. R. 13651, 65th Congress, 3rd Session).

A BILL TO PROVIDE EMPLOYMENT AND RURAL HOMES FOR THOSE WHO HAVE SERVED WITH THE MILITARY AND NAVAL FORCES THROUGH THE RECLAMATION OF LANDS TO BE KNOWN AS THE "NATIONAL SOLDIER SETTLEMENT ACT" (H. R. 487, 66th Congress, 1st Session).

DEPARTMENT OF THE INTERIOR: DRAFT OF BILL PROPOSED FOR CO-OPERATION BETWEEN THE STATES AND THE UNITED STATES TO PROVIDE EMPLOYMENT AND HOMES FOR SOLDIERS, SAILORS AND MARINES UNDER WHICH THE STATES SHALL FURNISH THE LANDS AND THE UNITED STATES THE FUNDS: WITH AN ALTERNATIVE PROPOSITION SO THAT THE STATES MAY PARTICIPATE FURTHER IN FURNISHING FUNDS AND ALSO IN SUPERVISING THE IMPROVEMENT AND SETTLEMENT OF THE LANDS. *Washington*, 2 December 1918

DEPARTMENT OF THE INTERIOR: SUPPLEMENT TO DEPARTMENTAL CIRCULAR DATED DECEMBER 2, 1918. Washington, 3 January 1919.

HEARING BEFORE THE SUBCOMMITTEE OF HOUSE COMMITTEE ON APPROPRIATIONS IN CHARGE OF SUNDRY CIVIL APPROPRIATION BILL FOR 1920 RELATING TO THE DEPARTMENT OF THE INTERIOR: 65th Congress, 3rd Session.

DEPARTMENT OF THE INTERIOR: WORK AND HOMES FOR FIGHTING MEN. Washington 1919.

OFFICIAL U. S. BULLETIN, Vol. 3, Nos. 531 and 652. Washington, 6 February and 15 March 1918.

THE RECLAMATION RECORD (issued monthly by the Reclamation Service of the Department of the Interior). Washington, July, August 1918 and January, February 1919.

The need of providing for returned soldiers and sailors has given a great impetus in the United States to the question of reclaiming and putting into cultivation the many millions of acres of land throughout the country which are still unused. At the close of the American Civil War, vast areas of public lands were immediately thrown open to settlement and the country was thus enabled to recover from the economic effects of the war more rapidly than would otherwise have been possible. The public lands are no longer available, but there are still immense areas of unused lands and it is proposed that employment should immediately be given to returned service men in the reclamation of such lands and that the lands, when reclaimed, should be offered to them for settlement.

A comprehensive plan with this object was drawn up by the Department of the Interior and communicated in a letter dated 31 May 1918 addressed to President Wilson by the Secretary of the Interior, the Hon. Franklin K. Lane. An outline of the scheme was also published in the Annual Report of the Department of the Interior for the fiscal year ended 30 June 1918.

A short bill making a first appropriation of $100,000,000 for carrying out the scheme was submitted to Congress by Mr. Byrnes and the hearings before the Sub-Committee of the Comittee of the House of Representatives on Appropriations in charge of the bill gave Mr. Franklin and various officials of the Department of the Interior an opportunity of explaining with great fulness the proposed scheme.

Both houses of Congress reported favourably on the Bill and from the nation at large it received much support. Congress, however, adjourned without voting on it.

A draft was also prepared of a bill to be submitted to State legislatures to provide for co-operation in carrying out the scheme between the State executives and the Federal Government. As the original draft was rather long and detailed, an alternative bill was drafted, containing only the essential provisions.

A further bill was presented to the House of Representatives in May last by Mr. Mondell, in which an appropriation of $500,000,000 was asked for.

Before describing the proposed scheme it will be well to give some account of the different classes of lands available for reclamation and some figures showing their distribution in the various States of the Union.

§ 1. The land available.

The time has passed when large areas of public lands which needed no reclamation before being cultivated were available for settlement. It is true that there are still in the United States some 230,000,000 acres of public lands, but the greater part of this land is valueless. It includes the tops of the Rocky Mountains and some of it is good grazing land, but except for grazing purposes most of it is practically unusable.

To provide land for settlement recourse must be had to reclamation and used land in private ownership must be taken and put into service. The public lands still include a certain quantity of arid lands susceptible of irrigation and of swamp lands which can be drained, but a far greater amount of unused land is now privately owned. This is notably the case with the so-called "cut-over" lands, that is, lands which contained forests, now cut down. Such lands belong, in general, to big lumber companies. There are also, in the Eastern and Southern States, a number of abandoned farms and plantations.

Setting aside the question of ownership, there are four classes of land which can be prepared for settlement: (1) Arid land; (2) Swamp land; (3) "cut-over" land and (4) abandoned farms.

The inquiries made by the Department of the Interior enable us to indicate to what extent each of these classes of land is available.

Arid land. — The reclamation of arid lands has been carried out systematically by the Federal Government since the passing of the Federal Reclamation Act of 17 June 1902. Speaking in the House of Representatives in June of last year, the Hon. Addison T. Smith stated that thirty distinct projects for the reclamation of arid lands were being carried out in 15 states, embracing over 3,000,000 acres of land, or 60 000 farms. Nearly 2,000,000 acres of land were already irrigated with water furnished by the Reclamation Service and over 1,000,000 additional acres would be reclaimed as soon as the necessary works then under construction could be completed. There had been expended on these projects nearly $120 000,000 dollars, about $8,000,000 of which had been paid by settlers under their contract for water and all of which would be repaid

in 20 years. The value of the 1917 crops on lands within Governement reclamation projects amounted to over $50,000,000.

The area of arid and semi-arid lands which could profitably be irrigated was estimated by the Department of the Interior as between 15,000,000 and 20,000,000 acres, but there is reason to think that even the lower figure is somewhat too high an estimate.

In most of the Western States suitable projects for the irrigation of arid lands can be found without difficulty. It is not, however, so easy to find feasible projects for the irrigation of semi-arid lands, owing largely to the fact that on such lands there is a gambling chance that men can make a crop without water.

In regard to the reclamation of arid lands it is to be noted that it is not always sufficient merely to bring water to the edge of the land. One large irrigation project was comparatively unsuccessful because, when the land was offered to settlers, it still required an expenditure of $50 an acre to clear and grade the land so that the water would flow on it.

Swamp Land. — The swamp lands lie largely in the eastern half of the United States. The approximate extent of these lands is shown in Table I.

In connection with the drainage of wet lands an essential part of the work of reclamation is, in many cases, the extermination of the mosquitoes which carry the infection of malaria. In parts of South Carolina, for example, there are lands which cannot be called swamps but are wet during a great part of the year, and in which there are swampy places and places where the drainage is sluggish. These lands are practically uninhabitable on account of mosquitoes. Private efforts which have been made on a small scale have demonstrated that it is possible to reclaim this land from its malarial conditions, but it is of little use to reclaim a small area, because it will be contaminated by mosquitoes from the vicinity.

In Florida there are nearly 5,000,000 acres which were originally overflowed with water from Lake Okeechobee. This no longer occurs, as the waters of the lake are drawn off by drainage canals, but the land requires further drainage to make it available for cultivation. There is, however, an obstacle to further drainage, as it is desired to make Lake Okechobee navigable and the drainage canals are closed by artificial dams to maintain the water in the lake at the desired depth.

For a somewhat similar reason there is local opposition to the drainage of the Okefinokee Swamp in Georgia. It is hoped that the proposed intercoastal canal will pass through the district and the swamp would be the water supply for the level to which the canal would have to be raised by locks in order to get it through that country.

The cost of reclaiming wet lands would rarely be lower than $30 per acre and in great swamps, where a complete system of drainage in detail would have to be put in, it might be $40 to $50 per acre.

TABLE I. — *Swamp Lands.*

State	Permanent swamp.	Wet grazing land.	Periodically overflowed.	Periodically swamp.	Total.
	Acres	Acres		Acres	Acres.
Alabama	900,000	59,200	520,000		1,479,200
Arkansas	5,200,000	50,000	531,000	131,300	5,912,300
California	1,000,000	1,000,000	1,420,000		3,420,000
Connecticut		10,000	20,000		30,000
Delaware	50,000	50,000	27,000	200	127,200
Florida	18,000,000		1,000,000	800,000	19,800,000
Georgia	1,000,000		1,000,000	700,000	2,700,000
Illinois	25,000	500,000	400,000		925,000
Indiana	15,000	100,000	500,000	10,000	625,000
Iowa	300,000	200,000	350,000	80 500	930,500
Kansas		59,380	300,000		359,380
Kentucky		100,000	300,000	44,600	444,600
Louisiana	9,000,000	1,196,605			10,196,605
Maryland	100,000		92,000		192,000
Maine	156,520				156,520
Massachusetts	20,000		39,500		59,500
Michigan	2,000,000	947,439			2,947,439
Minnesota	3,048,000	2,000,000		784,308	5,832,308
Mississippi	3,000,000		2,760,200		5,760,200
Missouri	1,000,000		1,439,700		2,439,700
Nebraska		100,000	412,109		512,100
New Hampshire	5,000		7,700		12,700
New Jersey	326,400				326,400
New York	100,000	100,000	329,100		529,100
North Carolina	1,000,000	500,000	500,000	748,160	2,748,160
North Dakota	50,000	50,000	50,000	50,000	200,000
Ohio			100,000	55,047	155,047
Oklahoma			31,500		31,500
Oregon	254,000				254,000
Pennsylvania			50,000		50,000
Rhode Island			6,000	2,064	8,064
South Carolina	1,500,000		622,120	1,000,000	3,122,120
South Dakota	100,000		511,480		611,400
Tennessee	639,600				639,600
Texas	1,240,000	1,000,000			2,240,000
Vermont	15,000		8,000		23,000
Virginia	600,000		200,000		800,000
Washington	20,500				20,500
West Virginia				23,900	23,900
Wisconsin	2,000,000			360,000	2,360,000
Total	52,665,020	6,826,019	14,747,805	4,766,179	79,005,023

"Cut-over" Lands. — By far the greater portion of the unused and unproductive land in the United States is comprised in the cut-over timberland lying largely within the eastern half of the United States. The approximate area of these lands in shown in the following table:

TABLE II. — *"Cut-over" Lands.*

State	Acres	State	Acres
Alabama	14,785,000	New Hampshire	2,608,000
Arkansas	13,893,000	New Jersey	1,151,000
California	3,031,000	New York	5,997,000
Florida	10,109,000	North Carolina	12,745,000
Georgia	20,141,000	Oregon	3,537,000
Idaho	676,000	Pennsylvania	5,297,000
Kentucky	3,222,000	South Carolina	8,994,000
Louisiana	11,877,000	Tennessee	7,833,000
Maine	6,135,000	Texas	12,936,000
Maryland	1,848,000	Vermont	2,070,000
Michigan	11,686,000	Virginia	9,929,000
Minnesota	14,022,000	Washington	3,330,000
Mississippi	13,203,000	West Virginia	4,634,000
Missouri	8,900,000	Wisconsin	13,246,000
Montana	674,000		
		Total	228,500,000

Not all the cut-over lands can be profitably cleared and cultivated There are areas which should be left in timber, because the land is not suitable for agriculture, being too rocky, too sandy, or too rough. In other areas, as in parts of the Pacific Northwest, the expense of clearing would be too great, because the stumps are large and the roots grow deep. They have to be taken out by hand or the use of explosives, and much excavation and levelling is afterwards required

The cost of clearing cut-over lands varies widely. It is roughly estimated that in the Lake States and in the South the cost would be from $27 to $40 an acre, while in the Northwest it would be much greater, and in the Northeast, where the timber when last cleared was very small, it would be much less. In certain lands in the Northeast, 90 per cent. of the stumps can be extracted by ploughing through the land with a very strong plough drawn by a powerful tractor

Much of the cut-over land is swampy and would require drainage as well as clearing. In North Carolina there is a large tract of land, containing 235,000 acres and belonging to a lumber corporation, part of which was swamp land and had to be drained to make it possible to cut the timber. It was drained to the extent of taking off the surplus water and the timber was cut. The corporation have undertaken, on a small scale, to clear the land for cultivation and their method is interesting. In the summer the saplings and undergrowth are cut down to the ground. The following

May they are dry enough to burn and are set on fire, together with the timber which has been left on the land. This destroys the weeds and undergrowth and cleans the land of every green thing. While the logs are still smouldering, a number of boys are sent over the land, carrying a string stretched out in a line across the field. At every pace, each boy makes a hole 5 or 6 inches deep with a stick, drops into it a couple of seeds of maize, and closes up the hole by treading on it. The maize comes up promptly and keeps down other growth by its luxuriance. Crops of from 25 to 50 bushels the acre have been obtained in this way. Immediately after the harvest such saplings as have come up are cut out, the logs which remain are piled on the stumps and the whole is again set on fire. The first two or three feet of the land consists almost entirely of vegetable matter and when the water is taken out it settles down. In the burning process, too, the surface burns off, but only half an inch to two inches, as there is too much water for it to burn deeply. In three years of this treatment the land will settle about 18 inches, and this leaves the stumps sticking out of ground, so that the fire can get in and burn the roots out. The cost of clearing is practically paid for by the maize which is grown during the process and in three years the land is in fairly good condition. It is still some time before the land can be ploughed, as the vegetable soil does not turn over nicely, but in two or three years its condition changes and it can be ploughed.

Abandoned Farms. — No estimate seems to have been made of the area of the land which has fallen out of cultivation in the Eastern and Southern States. It does not, of course, compare in extent with the other classes of unused land, but there are, nevertheless, considerable tracts of such land.

Within a short distance of Washington there is land which is lying derelict. In the State of New York there are many thousands of acres of extremely rich land, on which there are good houses still standing, which are forsaken and uncultivated. Near Albany ten or twelve thousand acres of such lands could be obtained almost in a solid block. In central Massachusetts and in Maine similar lands are to be found.

The cause of this abandonment is not easy to determine. Perhaps it is to be found in the " call of the West, " the attraction, that is, which the taking up of land in the Western States offers to adventurous spirits, as compared with the more humdrum conditions of life in the long-settled Eastern and Southern States. ' The mind of the country, " says the Report of the Department of the Interior for 1917-18, ' has been turned toward the development of the raw lands, the free unbroken lands, to the neglect of opportunities nearer to the centre of the country's markets. " But it appears that there have even been cases where the land has been so productive that the farmers have retired from farming and moved into the city, abandoning their farms.

In the Southern States there are many abandoned plantations, some of which now require reclamation to fit them again for cultivation. Another class of land is to be found in the south, land which has been bought

up by speculators and rented to irreponsible tenants who have worked it out without putting anything into it and have then moved off. Such lands cannot well be offered to soldier settlers until they have been brought back into good condition. In Georgia, it is stated, there are 100,000 acres of land which has been exhausted and abandoned.

§ 2. THE PROPOSED SCHEME OF RECLAMATION AND SETTLEMENT.

It is proposed, then, that a substantial sum be voted to enable the Reclamation Service of the Department of the Interior to undertake projects for the reclamation and systematization of unused land to be afterwards offered to returned soldiers or sailors. Beyond the initial sum of $100,000,000 asked for much larger sums will probably be required if the scheme is adopted and persisted in.

Employment on the work of reclamation would first be offered to the returned service-men. Such employment would be very varied in character — digging ditches and canals, driving tunnels, blasting out stumps, levelling off land, putting up houses and making roads — so that there would be scope for men of many occupations. Good wages would be paid, the workers would be comfortably housed and well looked after, and at the end even of a year they would be able to save a substantial sum.

When the land had been reclaimed it would be divided up into small farms and made ready for immediate occupation. The land would be drained, broken and fenced; it would have on it a house and a barn. Thus prepared, the farms would be offered for settlement. Preference would be given to returned soldiers and sailors and, in particular, to those who had worked upon the projects. It would not, however, be insisted that a man should take up land in the project upon which he himself had worked. He would be at liberty to take it up on any of the projects and in order to give a wide choice and to allow every man a chance of taking up land in his home State if he so desired, projects would be started, as far as possible, in every State.

In order to prevent speculation in land the farms offered would be limited to such an area as would enable a man to keep himself and his family in comfort, and no man would be allowed to acquire more than two such farms. The area would vary according to the locality; in some localities it would be 40 acres, while in others it would be 80 acres or more.

The value of the farms offered would, it is calculated, be from $4,000 to $5,000 and a settler would be asked to pay down 10 per cent. of the price on taking up the farm. The remainder of the price, with interest, would be paid off by annual instalments spread over a period of 40 years.

Where the land was originally in private ownership it would be bought by the Government at a valuation, but the price would not be paid directly by the Government. It would be paid to the owner by the settler in precisely the same way as he would pay the Government. Out of

the initial payment and the annual instalments, that is, would be paid to the owner sums bearing the same proportion to the total payment that the unimproved value of the land bears to the total improved value.

While the prospective settler was still working on the reclamation project, he would receive some agricultural instruction so as to prepare him for working the farm he will afterwards acquire. On entering the land, he would be provided with the necessary tools, and arrangements would be made to enable him to borrow money, if necessary, to purchase sheep and cattle. When he had been some years on his farm and had paid off a substantial portion of the purchase price, it is proposed that the Government's lien on the land should be allowed to run concurrently with a loan from a farm loan bank, so that the settler might further increase his stock.

Much stress is laid upon the importance of forming the settlers into communities, in order, as Mr. Lane crisply puts it, "to make the woman contented." It is proposed, then, to group the settlers into communities of 100, 150 or 200 families, round a centre in which there were such evidences of civilisation as a good school, a good store and a moving picture show. Every one of the farms should be connected with the centre by a good road and by a telephone, and the central community itself should be either on a railway or close to one and connected with it by a good wagon road. Only in this way, it is maintained, will the settlers feel that thay are not out of the world and be content to remain permanently on their land instead of merely holding it as a gamble upon the increase in its value.

The danger has been pointed out that pressure will be put upon the Department of the Interior to take very large areas, which would mean going into sparsely populated districts, but the Department seems to be fully alive to the danger and to be determined to avoid undertaking projects which would result in the establishment of settlements far from centres of population.

§ 3. Mr. Mondell's Bill.

Whereas the bill submitted by Mr. Byrnes merely proposed that the sum of $100,000 to be appropriated should be expended under the direction of the Secretary of the Interior, Mr. Mondell's proposed the creation of a definite fund, to be known as the National Soldier Settlement Fund, and asked for the appropriation of $500,000,000. While, under this Bill, the Secretary of the Interior would be authorized to use the Fund for the purposes of the Act, it was stipulated that no lands should be acquired unless the price to be paid and the conditions under which they were to be acquired were approved not only by the Secretary himself, but by a representative of the Governor of the State in which the lands are situated and an appraiser designated by the Federal Farm Loan Board.

Under this bill, it is proposed that the initial payment by a soldier settler on acquiring a farm shall be 5 per cent of the sale price, the bal-

ance being paid in amortizing payments extending over a period to be fixed by the Secretary, but not exceeding 40 years. The bill provides for two classes of loans being made to settlers out of the Fund — loans for improvements not exceeding $1,200 repayable by instalments within a period not exceeding 20 years and short-time loans, not exceeding $800, for the purchase of live-stock and equipment, repayable within five years.

§ 4. Co-operation between the States and the Federal Government.

The bills which were drafted for submission to State legislatures provided for the establishment of a Soldier Settlement Board, composed of three members, one to be nominated by the Governor and to be called the "Soldier Settlement Commissioner" who would be the chairman of the board, the other two being the President of the State Agricultural College and the State Engineer, or other appropriate officials as may be desired.

There would also be created a Soldier Settlement Fund, for which special appropriations would be voted.

The State Settlement Board would be authorised to undertake, in co-operation with the United States, projects for the reclamation of land and the settlement thereon of returned soldiers and would have full powers to acquire land, even compulsorily, for these purposes.

A large number of the States of the United States have already passed laws or appointed committees to co-operate with the federal government in settling discharged soldiers on the land. The measures of this description taken up to March of this year may be summarized as follows:

Alabama. — A law for the settlement of soldiers on the land has been passed, and the legislature has also passed a memorial urging the State's delegation in Congress to do everything possible to secure the enactment of a federal law in the same sense. A committee working under the State Council of Defence, and consisting of six State officials and three others, is officially in charge of the matter.

Arizona. — A bill for co-operation with the United States has been introduced.

Arkansas. — A committee has been appointed, and the legislature has passed a resolution urging the Arkansas delegation in Congress to advance federal legislation on the subject.

California. — On 21 January a bill authorizing a bond issue of $10,000,000 and an appropriation of $10,000 was introduced, to be subjected to a referendum to the people of the State. Another bill which authorizes co-operation with the United States and an appropriation of $1,000,000 has been introduced. The legislature passed a resolution urging Congress to adopt legislation on the settlement of soldiers.

Colorado. — A bill appropriating $750,000 to the settlement of soldiers in co-operation with the federal government has been introduced. A re-

solution in support of the legislation on this subject now before Congress was adopted by both houses of the State legislature.

Florida. — A law has been passed which authorizes the Internal Improvement Board to use State lands for purposes of the settlement of soldiers and to co-operate with the United States.

Idaho. — The legislature has passed an Act appropriating $100,000 to the settlement of soldiers.

Illinois. — A bill appropriating $1,250,000 has been introduced.

Kentucky. — A Soldiers' Land Settlement Committee has been appointed by the governor to represent the State in this matter.

Louisiana. — A committee of five has been appointed to represent this State, and approval of the legislation before Congress has been expressed to the President.

Maine. — The governor has, in his message to the legislature, urged co-operation with the United States in the settlement of soldiers.

Maryland. — The agricultural committee of the State Council of Defence is acting in the matter for the State.

Massachusetts. — A bill has been introduced providing for independent work of the State and for co-operation with the federal government in the matter. The bill makes an appropriation of $500,000.

Michigan. — Two bills have been introduced, one authorizing a corporation which shall aim especially at co-operation with the United States in the matter.

Minnesota. — A bill for co-operation with the United States for the settlement of soldiers and a bill for a landholding corporation which shall act with the United States have been introduced.

Mississippi. — The legislature does not meet until 1920, but a committee of eight has been appointed to represent the State at a State-wide meeting to be held for the purpose of formulating a policy.

Missouri. — Bills have been introduced for the construction of drainage and waterways, the provision of conservation commissioners, the utilization of moneys derived from the sale of sand and gravel from Missouri rivers, and co-operation with the United States in reclaiming land, and a bill for the settlement of soldiers.

Montana. — An Act which grants an appropriation of $50,000, for co-operating with the federal government in the settlement of soldiers, has been passed.

New Mexico. — A bill for co-operation with the federal government and a bill appropriating $400,000 have been introduced; and the legislature has memorialized Congress in favour of passing the law regarding the settlement of soldiers.

New York. — A bill for co-operating with the United States in the settlement of soldiers, which grants an appropriation of $250,000, has been introduced.

North Carolina. — A resolution to memorialize Congress to pass a law for the settlement of soldiers is pending. The governor has appointed a committee of three to represent the State.

North Dakota. — A bill appropriating $200,000 to the settlement of soldiers and immigration has been introduced.

Oklahoma. — A bill for co-operation with the United States in the settlement of soldiers has been introduced, and the governor has asked for a resolution memorializing Congress in favour of legislation on the subject.

Oregon. — The legislature has passed an Act creating the Oregon Land Settlement Commission, appropriating an emergency fund to immediate activities, and referring to the vote of the people an Act authorizing the sale of bonds for approximately $3,000,000 for the purposes of a general reclaiming and settling of land in conjunction with the federal government.

South Carolina. — A resolution has been introduced urging Congress to carry out the programme for the settlement of soldiers. The governor has appointed a committee of three to represent the State. A bill for co-operation with the United States which provides for a commission has been introduced.

Tennessee. — A resolution memorializing Congress to enact legislation for the settlement of soliers has been passed. State legislation for the same purpose is pending.

Texas. — The legislature has passed an Act referring to the people a constitutional amendment which allows the State to lend its credit for purposes of land settlement. A measure providing for the co-operation of the people with the federal government is being prepared.

Utah. — A State Water Right Commission and the committees of agriculture of both houses of the legislature are jointly preparing a bill which will provide $2,000,000 in bonds and an appropriation of $25,000.

Washington. — A bill has been prepared by the State Attorney General, supported by the Washington Reconstruction Committee, a representative body. It provides a small tax to be levied annually until 1928 and to form a fund which will eventually amount to $5,000,000. The bill appropriates $3,000,000 from such fund.

West Virginia. — Legislation for co-operation with the United States has been introduced.

Wyoming. — The legislature has passed an Act for co-operation with the United States in the settlement of soldiers. A Land Settlement Board is constituted and a loan of $200,000 from the State school funds is authorized.

* *

It will be seen that the proposals now before the United States open up a much wider question than the provision of employment and homes for returned service men. A new period in the settlement of the United States may be said to have begun with the passing of the Federal Reclamation Act of 1902, and the present proposals involve an intensification of the work now carried on by the Reclamation Service of the Department of the Interior and its extension to other classes of